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Annual Meeting
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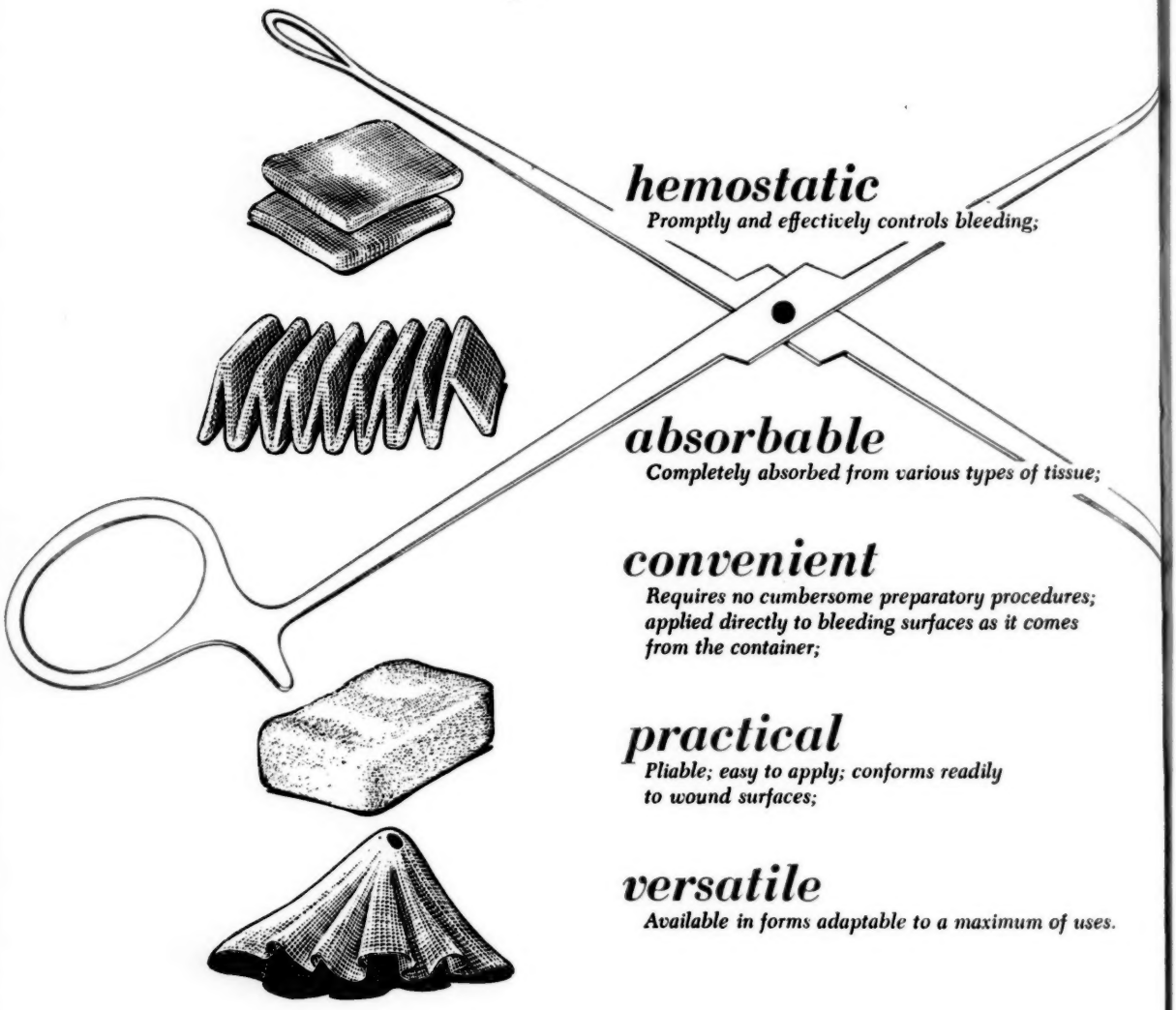

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GUEST EDITORIAL

The Problem of the False Positive Serologic Test for Syphilis

THE subject of false positive reactions in standard serologic tests for syphilis is of great importance to the practicing physician. For the patient or the individual whose blood is being tested, it is of paramount importance, as the diagnosis, and the physician's decision concerning treatment so often depends on the laboratory procedure. Because of the increasing sensitivity of serologic tests currently being used, and in consideration of the fact that the blood serologic tests are not specific for syphilis, it behooves the physician to know what conditions other than syphilis may produce false positive reactions.

False positive reactions fall into two main categories—the technical false positive, and the biological false positive. Both are of equal importance to the physician. In far too many instances the establishment of a diagnosis and the institution of therapy depend on the laboratory test report rather than on sound clinical evaluation.

Technical false positive reactions occur in serum containing no antibodies, and may be due to: 1. Technical errors in the collection and labelling of specimens; 2. The use of bacterially contaminated or hemolyzed specimens; 3. Errors in the performance of the serologic tests; 4. The use of faulty materials and reagents in the tests; 5. Errors in recording or reporting the results. Fortunately, such positive results are not usually confirmed when rechecked with a different test or when a second specimen is retested with the same procedure. In well regulated laboratories these technical errors are infrequent. Since this type of false positive reaction occasionally may occur even in the best of laboratories, no patient ever should be treated for syphilis on the basis of a *single, unconfirmed, positive blood serologic reaction.* The frequency of occurrence of these false positive reactions is usually directly proportional to the care exercised in the performance of the tests and the skill and experience of the individual performing them.

In the first laboratory evaluation study conducted by the Virginia State Health Department, thirty laboratories participated and only nine achieved satisfactory ratings in both sensitivity and specificity in one or more test procedures. Five laboratories had unsatisfactory ratings in both sensitivity and specificity. In this evaluation one laboratory achieved a specificity rating 33. Physicians who in good faith used the services of this laboratory would receive positive serologic reports on perfectly normal persons in a ratio of sixty-seven positive reports per one hundred specimens submitted. While the results of the study were discouraging to the Syphilis Committee of the State Medical Society and the Staff of the State Health Department they realized

that through evaluation studies private and public laboratories could be encouraged to improve their standards.

In the 1948 study sixty laboratories participated and all these achieved satisfactory ratings in specificity and sensitivity. These results are excellent and evidence great improvement in a period of eight years, however, as a significant number of laboratories performing serologic tests do not participate in these studies the physician should make inquiries to see if the laboratory of his choice is approved or not.

Biological false positive reactions are due to the presence of antibody-like substances or alterations in the globulin fractions of the serum. Dr. John H. Stokes of the University of Pennsylvania has enumerated about thirty conditions which render frequent, occasional or disputed biologically false positive serologic reactions. Further, investigations conducted at the Army Medical School by Dr. Charles R. Rein have disclosed still other diseases and conditions which may cause false positive serologic reactions. In fact, any metabolic disturbance of febril episode may at times influence the reliability of sero-diagnostic tests for syphilis. Placental transference of antibodies from the syphilitic mother's blood to the newborn infant often gives a temporary false positive serologic reaction. Approximately one in six infants born with positive serology do not have syphilis, and will have negative serology within six to twelve weeks.

The following diseases and conditions have been mentioned as causes of the false positive reaction: infectious mononucleosis, tuberculosis, jaundice, anesthesia, pregnancy and the common contagious diseases, i. e., measles and mumps, smallpox and other vaccina; acute febrile episodes, some forms of malignancies and certain virus infections. A few dermatological conditions, psoriasis, acne, lupus vulgaris and seborrheal eczema have caused false positive reactions. Among the less common conditions which cause such false positive reactions are trypanosomiasis, malaria, yaws, pinta, kala-azar, leprosy and relapsing fever.

In addition certain normal individuals who are not ill and who do not have syphilis give a non-specific reaction due to antibody-like substances or alterations in the globulin fractions of the serums.

From the above summary of the technical and the biological factors influencing standard serologic tests for syphilis, it is apparent that the chance of error in the test procedure while not great, is of sufficient significance to require caution in the interpretation of test reports. In the absence of a history of syphilis and/or clinical evidence of infection there is no urgency in prescribing treatment. True the patient may have syphilis in a latent phase of the disease, but, in fairness to the patient, obtain repeated serologic tests over a period of time, keeping in mind the fact that some of the disease processes and conditions that give biologic false reactions persist up to ninety days. In the absence of manifest clinical signs remember "There is no urgency in latency."

E. M. HOLMES, JR., M.D.,
Richmond Virginia.

EDITOR'S NOTE: Dr. Holmes is assistant director of public health of the City of Richmond.

REGIONAL ILEITIS: A REPORT OF TWO CASES WITH A SUMMARY OF THE LITERATURE*

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Richmond, Virginia.

My interest in the subject of regional ileitis dates back several years to my first case which I will report later. Since that time I have added another of identical nature. These two cases required resection of the terminal ileum, cecum, ascending colon and the right half of the transverse colon.

In a search of the literature to find the opinion of others on this subject, I was confronted with a multiplicity of names, many of which mean practically the same thing. A few of these are regional ileitis, regional enteritis, terminal ileitis, acute ulcerative ileitis, phlegmon of the ileum, non-specific ileocolitis, ulcerative ileocolitis, regional ulcerative enterocolitis, ileocecal pseudo tumor, chronic cicatrizing enteritis, ulcerous stenosing inflammation of the lower ileum, non-specific intestinal granuloma, and Crohn's disease. This list gives an idea of the various names describing different phases of the same pathology. The original name, terminal ileitis, as given by Crohn, Ginzburg and Oppenheimer,[1] when the disease was thought to be confined to the terminal ileum alone, is now obviously inaccurate and misleading, as are many of the other terms which limit the disease to the ileum or its lower segment. Most of the terms used were merely descriptive of the region of the bowel in which the disease process occurred and gave no adequate information as to the nature of the lesions. Probably the most accurate term and one which should be universally accepted is "non-specific inflammatory granuloma," specifying the region of the intestine involved, as it is both descriptive of the location and the pathological nature of the disease.

In a study of fifteen or more recent articles on the subject, I was impressed with the all inclusive work and review by Robert Shapiro[2] under the guidance of Ravden and Johnston. In summarizing the literature, he reviewed over two hundred and eighty articles, and correlated varying opinions on the subject. With some he frankly disagrees, and with others he agrees as to pathology, etiology, and indeed all phases of the subject.

*Read before the Richmond Academy of Medicine, February 17, 1948.

Anyone doing abdominal surgery is apt to have seen a number of cases of ileitis when operating for acute appendicitis, usually without any gross acute appendiceal pathology. Certainly, the vast majority of these cases go on to an uneventful convalescence and have no further trouble. Certain of these acute cases, however, do present themselves with a group of symptoms now regarded as fairly typical and of themselves suggestive diagnostically.

The literature shows that it is not a new subject, as the first gross, microscopic description was reported by Moore in 1882. It was next referred to in 1905 when Willmans reported a case of intestinal obstruction following a chronic inflammatory thickening of the ileocecal valve with resection and recovery. During the next few years a number of cases were reported by various authors, and there is little doubt that many of the early cases were classed as hyperplastic tuberculosis of the cecum and colon.

Its etiologic origin is unknown, but volumes of work have been written in attempting to assign a causative organism only to have such reports condemned by others. In 1914, Lawen, in his article on fibroplastic appendicitis, advanced the theory that these granulomatous growths were due to extraordinary forms of chronic appendicitis, and that the process began in the appendix and then spread to the cecum, ileum and ascending colon. He agreed with many of the early authors that these processes had been confused with hyperplastic intestinal tuberculosis and he classified the lesions into three main forms:

1. Inflammatory tumors of the cecum and adjacent colon not having their origin in the appendix.
2. (a) Inflammatory tumors which, to be sure, originate in the appendix, but only implicate this organ to a slight degree and extent by involving the anterior or posterior abdominal wall (after appendicitis and pericecal induration of the retroperitoneal tissues, etc.). (b) A form surrounding the intestine and omentum with the formation of dense adhe-

sions and with what he was pleased to describe as fibroplastic appendicitis.

3. Inflammatory tumors which originate in the appendix and which remain in the main localized in the appendix itself, cecum, ascending colon and terminal ileum.

In 1923 Moschcowitz and Walenski[3] published the first comprehensive survey in this country of non-specific intestinal granulomas. They emphasized the non-specific origin of the disease and also the presence of foreign body giant cells, and commented on the remarkable resemblance of some of the cases to hyperplastic tuberculosis of the intestines. After reviewing the literature on the latter subject, they concluded that this form of tuberculosis was rather uncommon, and that many cases of the so-called "hyperplastic tuberculosis of the colon" were in reality simple inflammatory processes.

In the ensuing years there were many reports in the literature on this subject. Horsley[4] in 1925 described a case of typical regional ileitis. However, it is to Crohn, Ginzburg and Oppenheimer, who in 1932 published their observations, that credit is due for arousing general interest in the subject.

ETIOLOGY.

Numerous authors have put forth different theories as to the causative factors involved in the production of this disease.

1. *Bacteria.* (a) Bacillus coli and Bacillus dysenteriae are the chief organisms mentioned, but there is no agreement that these are causative factors, even though it is well known that both can cause ulcerative lesions. (b) The tubercular bacilli have been mentioned, only to be ruled out as a causative agent; so have all other bacteria.

2. *Bacterial toxins* have been mentioned as a causative factor in which the toxins might enter through a break in the mucosa and thus produce a low grade inflammatory action characterized by sudden infiltration, etc. This, however, seems unlikely since similar lesions have not been encountered in other conditions in which mucosal ulceration is known to exist.

3. *Viruses.* There seems to be no evidence in support of this theory.

4. (a) *Protozoa,* notably the Endamoeba histolytica, has been considered by some as a possible cause, only to have this cause refuted because in cases of amoebic infestation the ascending colon and lower ileum are practically uninvolved. (b) The stenotic lesion of the hypertrophic polypoid growths, typical in advanced cases of regional ileitis, are not characteristic of amoebic infection. (c) Amoebic dysentery does not extend into the upper ileum.

5. The *Metazoa* have been mentioned. While there is considerable debate on this subject, yet it is generally agreed that this group of parasites can produce lesions greatly resembling regional ileitis, but they cannot be regarded as the usual causative agent due to the fact that repeated stool examinations in nearly all the cases of regional ileitis have failed to disclose the presence of the metazoal worms.

6. *Achylia gastrica* has been mentioned. However, it has been proven that a majority of the cases of regional ileitis have normal gastric juices.

7. *Allergy.* Kraemer[5] calls attention to the prominent enlargement of the mesenteric lymph nodes in regional ileitis and suggests that possibly the disease is primary in the lymph nodes with a secondary allergic spread to the intestine by way of the mesenteric lymphatics due to an overwhelming dose of infective agent.

8. *Foreign bodies.* These have been implicated many times as being causative of non-specific intestinal granuloma. While a foreign body may undoubtedly produce a non-specific inflammatory growth in the intestine, it is not the ordinary etiologic agent, since in the great majority of cases of regional ileitis, diligent search has failed to reveal the presence of foreign bodies.

9. *Trauma* has been mentioned as being productive of such a lesion. The absence of trauma, however, in most cases does not lend support to this view.

10. *Non-specific inflammation of the appendix.* It seems generally agreed that perhaps the appendix may sometimes play the role of an etiologic agent. Nevertheless, the finding in many cases of regional ileitis of an appendix grossly and microscopically normal would seem to preclude the implication of this organ as the usual primary seat of the pathological process.

11. *Impairment of the blood supply,* such as might be encountered following intestinal obstruction, recurrent partial volvulus, mesenteric thrombosis, hernial incarceration and intussusception. Any of the above factors can cause an ulceration in the

mucosa with secondary infection, connective tissue proliferation, and with ultimate stenosis of the lumen. Those who have seen cases caused by the above state that the pathology is quite analogous to that produced by regional ileitis. Others, however, by disturbing the blood supply to the bowel have failed to produce similar lesions.

12. *Interference with the lymphatic supply.* The theory has been offered by Bell[6] that the etiologic agent might be mucosal infection spreading to the wall of the intestine and producing edema of the mesentery due to insufficient lymphatic drainage, or that the infection began as lymphangitis and then involved the wall of the gut. Sclerosing materials have been injected into the lymphatic vessels and when injecting bacteria with these preparations, Reichert and Mathes[7] were able to produce edema and extreme thickening of the wall of the bowel, which changes were thought to be permanent.

13. *Heredity* has been mentioned. It has been conjectured that congenital predisposition or a transmissible etiologic factor played a part; however, in the light of the lack of evidence and corroboration by others, it is very likely that the finding of two cases in the same family was accidental.

Since all of these various etiologic factors may produce lesions which greatly resemble one another, one must, in the absence of further proof, think of the possibility of regional ileitis resulting from a number of heterogeneous, primary irritating agents.

SYMPTOMATOLOGY AND CLINICAL COURSE.

The symptoms, of course, vary with the location of the lesion and the stage of the disease encountered. Crohn, in his original paper, divided the symptoms into four groups:

1. *Signs of "acute surgical abdomen."* These patients exhibit the symptomatology of an acute intra-abdominal inflammation which cannot be distinguished preoperatively from acute appendicitis. There are pain and tenderness in the right lower quadrant if the lower ileum is involved; whereas, the pain is higher in the abdomen if the upper ileum or jejunum is involved. There are generalized colic with fever, at times up to 103 degrees, and a moderate leukocytosis. The mass is usually not palpable. At operation it is readily seen that the involved segment of intestine is soggy, edematous, reddened and greatly thickened. The mesentery of this portion of the bowel is also edematous and thickened and contains numerous large hyperplastic lymph nodes. There may be a small amount of clear fluid present in the abdominal cavity. The appendix often shows little, if any, sign of pathological involvement, but, if the lesion be confined to the terminal ileum, it may be reddened along with the cecum, or, in other words, its pathology then is that of the adjacent bowel. Occasionally the appendix is very seriously diseased, and, if drainage is necessary or an abscess is found, is prone to give rise to a fistula, such as happened in one of the cases I wish to report.

2. *Symptoms of ulcerative enteritis.* These patients have colicky pain with a low grade diarrhea, with stools containing mucus and blood, associated with marked weight loss and a secondary anemia. This anemia may at times become very severe and the patient's wasting very marked. One rarely sees the tenesmus and griping at stools with urgency which is fairly characteristic of colitis and rectal disease. Often these cases run a low grade fever.

3. *Symptoms of chronic, incomplete, intestinal obstruction.* The stage of ulceration is followed by a stenotic phase, and it appears from the literature that this phase may occur in a patient who has had the symptoms of the two milder stages and occasionally the first indication of the disease may be signs of incomplete, intestinal obstruction. This obstruction is due to extreme thickening of the wall of the intestine with resulting narrowing of its lumen, the chief symptoms being severe abdominal cramps, borborygmus and visible peristalsis. Pain at times seems relieved by defecation, only to return a short time later. There may be vomiting, which is usually intermittent in type and is not that of an impending obstruction. During this stage of the development, a mass is usually present in the lower right abdomen, and almost invariably so if the lower ileum is the site of the pathology. However, with upper ileum or jejunal involvement, the mass may be higher up, as mentioned above.

4. *Chronic fistula formation.* These fistulae occur late in the disease unless there has been earlier surgery, and are formed as a result of slow perforation of the ulcers. A peculiarity of these fistulae is that, in contra-distinction to fistulae of appendicular origin which tend to heal, they fail to close spontaneously and resist simple operative closure usually. They may be of a number of types, de-

pending upon the bowel which happens to be in close proximity to the diseased segment, and often become external through the incision after surgery. Indeed, a fistula appearing and persisting after an appendectomy for supposed acute appendicitis is almost diagnostic of ileitis. Perirectal abscess is also given as a frequent complication and is often one of the earliest manifestations of the disease.

5. *X-ray findings.* In the early acute case there may be no significant abnormal finding on x-ray, but as the disease progresses a fairly constant defect is noted in the affected loop of bowel. The degree of this filling defect, of course, depends upon the extent of the stenosis present. "The string sign," which is considered pathognomonic of an advanced case, represents a thinned out, barium filling of a greatly narrowed intestinal lumen. A failure to demonstrate this, however, does not exclude the condition, as, of course, other stenosing processes also occur in the small bowel. The x-ray, however, connected with the story should lead one to the right diagnosis.

PATHOLOGICAL ANATOMY.

In its acute stage the disease shows in the affected portion a blotchy, soggy, edematous mass of greatly thickened and greatly reddened bowel. Its mesentery is also thickened and edematous and contains a number of large hyperplastic glands. The serosa presents a mottled red appearance and often there is found a small amount of serous fluid in the cavity. In the latest stages, the pathological changes having become more advanced, the diseased bowel presents the appearance of a thick, firm, rigid, unyielding tube not unlike a garden hose, with its mesentery greatly thickened. There is a marked tendency toward perforation which is combated by the formation of adhesions to the parietal peritoneum, omentum, or adjacent viscera. The diseased segment is very sharply demarcated from the normal intestine. The lumen of the bowel is greatly constricted and distorted, at times being almost obliterated, with the lumen above the obstruction becoming dilated as the obstruction becomes more complete. The mucosa is edematous and shows a series of ulcerations, and the serosa is thickened and fibrosed, and at times presents tubercle-like structures on its surface. It is these which have caused so much confusion and faulty diagnosis at the operating table, leading the surgeon to call the simple granulomatous lesions "hyperplastic tuberculosis of the intestines." Histologic sections, of course, confirm the gross thickening of the intestinal walls as indeed all the layers of the walls are involved in the process with varying amounts of fibrosis, the mucosa showing irregular ulcerations containing many neutrophils and foreign body giant cells.

DIFFERENTIAL DIAGNOSIS.

It is important that regional ileitis be differentiated at operation from a number of conditions which may mimic it, both in symptomatology and not infrequently in gross appearance.

1. *Neoplasm, sarcoma and carcinoma* of the intestine may simulate regional ileitis, so much so that the diagnosis of inoperable carcinoma has been made at the operating table in numerous instances of regional ileitis, and the true condition has remained unrevealed until microscopic studies of the diseased bowel had been completed. Carcinoma of the jejunum and ileum is a very rare condition, however, and sarcoma of the intestine is equally rare, and rarer still does it cause a stricture. Biopsy of the regional lymph node for histologic study will aid in the diagnosis.

2. *Hyperplastic intestinal tuberculosis.* Intestinal tuberculosis in individuals with pulmonary tuberculosis is by no means uncommon and frequently occurs in patients with active pulmonary lesions. This type of intestinal tuberculosis is characterized by the presence of ulcerated lesions scattered throughout the jejunum and ileum, and to a lesser degree in the colon. These ulcers lie, more or less, in the transverse axis of the bowel, and the serosal tubercles on the external surface give one the means of identifying the lesions. Hyperplastic intestinal tuberculosis of the ileum alone is almost never seen. Final differentiation, however, may be made by guinea pig inoculation and by staining sections of the intestine for tubercle bacilli. In all instances of regional ileitis both of these procedures have consistently yielded negative results.

3. *Ulcerative colitis.* Diagnosis in this condition, of course, is usually readily recognized by roentgenological study in conjunction with opaque media and sigmoidoscopy; however, in those forms of colitis involving only the proximal wall of the colon in which there are no lesions of the sigmoid and rectum, differentiation is quite difficult. These cases

may be recognized by the spasm deformity of the portions of the colon involved and by obliteration of the haustra. The final diagnosis rests on a roentgenologic basis. In cases of regional ileitis with colonic involvement (as both my cases were) there is a slight diarrhea, high temperature, prostration and abdominal tenderness.

4. *Actinomycosis.* The intestinal form of this disease usually originates in the cecum and frequently results in the formation of a mass in the right lower quadrant. It is, of course, exceedingly rare. The diagnosis is made by finding "sulphur" granules in the discharge.

5. *Syphilis* is very rare in the intestine, but may occur both as a congenital and as a primary condition. The former lesions are found most often in the terminal ileum where the healing of syphilis ulceration produces constriction and stenosis. Primary syphilis of the intestine, however, has a predilection for the lower end of the colon and rectum and thus offers less of a diagnostic problem.

6. *Hodgkin's disease* may be differentiated from regional ileitis by histologic examination of a regional lymph node.

7. *Appendicitis in the acute stage* is impossible to differentiate from acute ileitis. An abnormally high fever and the presence of loose stools should serve to remind one of the possibility of ileitis.

8. *Other lesions,* such as mesenteric lymphadenitis, ovarian cyst with a twisted pedicle, postoperative adhesions, appendiceal abscess, Meckel's diverticulum with tumor, tubo-ovarian tumors, etc., may likewise confuse. Final differentiation again is on a roentgenological basis.

STATISTICAL STUDIES.

Analysis of cases reported shows that it occurs in males slightly more than in females, and not in the ratio of 2 to 1 as Crohn originally reported.

TREATMENT.

The treatment depends on the stage of the disease and the condition of the patient. In the acute stage there is no agreement of opinion as to the surgical precedure of choice. Some observers recommend radical surgery in the acute stage (enterostomy, resection, short-circuiting) because of the frequently progressive character of the disease. On the other hand, the more recent tendency has, for the most part, been toward a conservative mode of therapy, i.e., an exploratory operation with no operation on the intestine *per se.* It has been my experience that practically all of the cases which we have observed in their acute phase have subsided entirely and have caused no further symptoms. I know of no way by which one can determine in a given acute case whether it is going to respond satisfactorily to conservative treatment or whether it will go on to the ulcerating, stenosing and luminal obliterating lesions. It would seem wise not to operate radically until the extent of the spread of the lesion has been determined, and then the resectioned level should extend well beyond the grossly diseased area. In the chronic stage of the disease, the patients show only wasting, low grade fever, anemia, varying degrees of abdominal discomfort, loss of weight, at times to an alarming degree, and appear very chronically ill. In this chronic stage, surgical treatment is undoubtedly the sole procedure to be recommended, at which time it is equally as important to excise the diseased portions of mesentery along with the bowel itself. Operations designed to short-circuit the diseased areas seem less satisfactory than those in which the diseased areas have been widely excised. Resection of the diseased portion of the intestine, however, has relieved all symptoms in 67.9 per cent of patients in whom this procedure was employed.

The literature is filled with cases of recurrence of symptoms after a too conservative resection in which portions of the diseased bowel have been left in place. Oppenheimer suggests dividing the ileum at least twelve inches above the disease which is both visible and palpable.

CASE REPORTS.

Case I. J. F. K., age 14 years, was first seen by me in June, 1943, complaining that in the past 8 weeks he had lost his appetite and 26 pounds in weight, and he felt tired almost constantly. He had vague abdominal pains aggravated by taking food. His mother stated that normally he was very athletic.

His height was 5 ft. 4 in., weight 104 pounds. At times he had a temperature of 100 degrees. His tonsils were diseased. Blood examination revealed a hemoglobin of 74 per cent, red blood cells 4,500,000, white blood cells 11,700, polymorphonuclears 67 per cent, and eosinophils 2 per cent. Sedimentation rate 21. Blood Wassermann was negative. Urinalysis was negative. Stool examination was

negative except for a trace of blood. The State Laboratory reported blood cultures and agglutination tests negative; stool culture positive for Proteus morganii. Chest x-ray was negative.

Gastrointestinal x-ray was as follows: "Preliminary fluoroscopic examination of the chest does not reveal anything of clinical significance.

"Stomach is normal in size and shows no filling defect. Peristalsis is normal and the waves pass to the extreme pylorus without any interruption. The duodenal bulb fills well and appears entirely normal from both directions. The course of the duodenum is normal and the stomach empties at a moderate rate of speed.

"Five-hour examination. The stomach is empty. The structures, however, are not well identified.

"Twenty-four-hour examination: The colon is empty except for a few traces in the rectum and the lower sigmoid. The appendix is not seen.

"The films of the stomach verify the fluoroscopic impression, and nothing indicative of an organic lesion is seen in the stomach or duodenum. The five-hour film shows the transverse colon fairly well filled with marked prominence of the haustral segments. There are a few strands of barium occupying a normal position in the cecum and ascending colon. The appendix is not identified.

"Conclusion: There is no evidence of an organic lesion involving the stomach or small intestines. The failure of the cecum and ascending colon to be properly filled and to be identified, is highly significant. This should be checked by means of a barium enema, which was attempted, but could not be done because of the inability to insert the rectal tube. Advise proctoscopic examination, and if there is no mass interfering with the insertion of the rectal tube, a barium enema may then be done at a later date. The transverse colon appears markedly spastic and there is a hypermotility of the large bowel, which is often noted in tuberculosis of the cecum."

The patient left the hospital on July 3, 1943, and was put under the care of his family physician. After a trial at sulfa therapy, low residue diet, etc., his condition improved. Shortly after this his family physician entered the Armed Services and the patient was not heard from again until late October, 1943, when he returned complaining of being tired, cross and weak. He had entered school as usual but was unable to take part in athletics. During the past two or three weeks he had lost fifteen pounds, his appetite was very poor, and there was almost constant vague abdominal discomfort with occasional vomiting. His hemoglobin was 66 per cent and red blood count 3,930,000. In view of the previous x-ray report, it was not thought necessary to repeat that examination. The diagnosis was tuberculosis of cecum, or ileitis with cecal and ascending colon involvement.

Transfusions were given, and on November 3rd the diseased ileum, cecum, ascending colon and right half of the transverse colon were excised with an end-to-side, ileum to colon anastomosis. His convalescence was gratifyingly smooth. The specimen removed showed marked thickening of the last 12 to 14 inches of ileum, cecum and lower half of the ascending colon, the lumen being almost obliterated in places. The mesentery was studded with large glands.

Microscopic report by Dr. Frank L. Apperly was as follows: A very acute inflammation and necrosis of mucous membrane, a great thickening of the submucosa and subserosa with edema and subacute inflammatory cells. Diagnosis: Ileitis with marked involvement of cecum and ascending colon.

Since that time his health has been excellent and today he would be the apple of any football-line coach's eye.

Case II. Miss E. A., age 20 years, was first seen in May, 1945, when she came to the office for dressing of a sinus which had persisted for several months following appendectomy with drainage elsewhere. She stated that her doctor had told her she had the worst case of appendicitis that he had ever seen. After several weeks of dressing the sinus, it showed no tendency toward healing. We then began to wonder about the cause of the delay. Did we have a foreign body (fecal concretion) in the abdomen? Had the operator used a non-absorbing suture when removing the appendix? Or, were we dealing with a case of ileitis with fistula formation? I wrote the surgeon who had removed the appendix, asking him whether the appendix had ruptured and whether he had used non-absorbable suture material at operation. His reply stated only that hers was a very bad case of appendicitis and that he remembered nothing unusual about it.

A revised history gave us an additional clue to

the diagnosis, namely, that the illness had preceded appendectomy by four or five months, during which time she had had abdominal pain, griping, nausea, at times very marked, associated with a loss of appetite and a loss of twelve or fifteen pounds of weight.

On February 11, 1946, we explored the abdomen, finding that the fistulous tract had originated in the ileum about 3 inches above the cecum. The lower 8 or 10 inches of the ileum was much thickened and edematous, the serosa being covered by a heavy plastic exudate. The mesentery of this portion of the bowel contained many large lymph nodes. We were not prepared to do a resection of the bowel. The patient, her family, and the family physician had not been told of this possibility, nor did we feel that the patient was properly prepared for such surgery. After a hurried consultation among our staff we excised the fistulous tract and the wound healed by primary union and remained so. Her convalescence was uneventful.

She was put on a low residue diet, mineral oil, and antispasmodics. She regained her weight and felt well until after a series of social events which took her out of town during the late spring and early summer. She returned early in July, 1946, rather despondent, twenty-five pounds underweight, and with an aggravation of all her former symptoms. Her hemoglobin was 66 per cent, red blood count 4,900,000.

Gastrointestinal x-ray on July 10th was as follows: "General preliminary fluoroscopic observation of the chest does not reveal anything of clinical significance.

"Stomach is normal in size, and shows no filling defect. Peristalsis normal and the waves pass to the extreme pylorus without any interruption. The duodenal bulb fills well and appears entirely normal from both directions. The course of the duodenum is normal and the stomach empties at a moderate rate of speed.

"Six hour: Stomach is empty. The progress of the barium column is uncertain. There is a very stringy shadow occupying the region of the cecum, ascending colon, and hepatic flexure.

"Twenty-four hour: Small intestines empty. Patient has had four or five stools and the entire colon is empty. The barium enema is to be run in four days.

"Barium enema, July 15th: The barium flows without obstruction from the rectum to the cecum and into the terminal ileum for quite a distance. The left half of the transverse colon, descending colon, and sigmoid appear normal. The ascending colon is deformed and the cecum is practically obliterated. The terminal ileum, adjacent to the cecum for about two inches, is narrowed, but the ileum beyond this point appears approximately normal. A ruptured appendix has been removed.

"Conclusion: Patient has an organic lesion involving the terminal ileum, the cecum, ascending colon, and the right half of the transverse colon. The condition is considered to be a terminal ileitis which has extended upward to involve the colon as far as the middle of the transverse portion. Nothing of clinical significance is seen in the stomach or in the duodenum. There is no evidence of obstruction in the gastrointestinal tract."

On August 21, after a week's oral administration of amino acid and a transfusion of 500 cc. of whole blood, we explored the abdomen. We made a low right rectus incision and did a resection of the terminal twelve to fourteen inches of ileum, cecum, and ascending and right half of the transverse colon—all for regional ileitis. Several very large mesenteric nodes were noted. The end of the transverse colon was closed, using the interrupted sutures and fat tags sewn lightly over the end, following which the end of the ileum was anastomosed to the side of the transverse colon. The operative area was liberally dusted with sulfanilimide powder and the wound closed in the usual manner.

Postoperatively she received another 500 cc. of whole blood and 500 cc. of plasma. Her convalescence was remarkably smooth and she left the hospital on her 19th postoperative day.

The pathological report of the ileum and right colon was as follows:

"Gross examination of cecum and 8 to 10 inches of adjacent ileum and colon. The bowel is swollen and edematous with large lymph nodes in the mesentery. On opening there is a granular ulcerated appearance in the cecum with a red edematous colon. Microscopic examination: Section from the intestine shows marked edema with hemorrhage separating the mucosal glands. There is also granulation tissue in the submucosa and wall. This is very marked, and there are scattered foci of round

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cells with occasional foreign body giant cells. The lymph nodes show a subacute chronic lymphadenitis with again giant cells and mixed cell infiltration. Diagnosis: Subacute ileitis."

When last seen, the patient was entirely comfortable. The tendency toward liquid bowel movements had subsided. She was eating a regular diet and she weighed more than at any previous time.

CONCLUSION

These two cases are presented mainly because of their rarity, but partly because they illustrate rather extreme end-results of a rather common lesion, acute ileitis.

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England Under National Health Act.

Since the National Health Service Act has been in effect in England, doctors' offices are overcrowded by persons, "many of whom have little or nothing the matter, seeking medical advice," says the London correspondent in a recent issue of *The Journal of the American Medical Association.*

"What may happen if we have a winter epidemic of some kind is a nightmare for the physician," his foreign letter says, adding:

"The demands for drugs and apparatus is excessive. For the first three months of the service the national bill for eye testing and spectacles amounted to nearly $4,000,000, for drugs $7,600,000 and for dentists, including dentures, $4,900,000. These figures do not include the cost of treatment and appliances provided through the hospitals.

"An abuse of the Health Service has occurred, the extent of which cannot be stated because of the secrecy of the practice. A woman obtains a prescription from a doctor for which she has little if any need. Perhaps she shams illness. She takes the prescription to a pharmacist and trades the prescription for cosmetics or other things which he sells. The pharmacist has no difficulty in getting payment for the prescription, as he returns it with those that he has dispensed. Both score over this fraud. The woman obtains her cosmetics for nothing and the pharmacist probably makes an increased profit on this sale of cosmetics."

"A crowning bit of extravagance may be mentioned," the article continues. "Foreigners who come to this country are to be entitled to free medical attention at the public expense for the first two months."

How Old Are You?

Youth is not a time of life—it is a state of mind; it is a temper of the will, a quality of the imagination, a vigor of the emotions, a predominance of courage over timidity, of the appetite for adventure over love of ease.

Nobody grows old by merely living a number of years. People grow old only by deserting their ideals. Years wrinkle the skin, but to give up enthusiasm wrinkles the soul. Worry, doubt, self-distrust, fear and despair—these are the long, long years that bow the head and turn the growing spirit back to dust.

Whether seventy or sixteen, there is in every being's heart the love of wonder, the sweet amazement at the stars and the starlike things and thoughts, the undaunted challenge of events, the unfailing childlike appetite for what next, and the joy and the game of life.

—*Selected*

DIAGNOSIS AND TREATMENT OF MALIGNANT TUMORS OF OVARY*

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Historically, it may be pertinent and of some interest to recall to your attention the fact that the first ovariotomy in the world was performed in 1809 by Ephriam McDowell, a native of Virginia practicing in Danville, Kentucky. The patient, a Mrs. Crawford, survived and lived for more than thirty years afterward.

Although a complete discussion of malignant tumors of the ovary should probably be based on some sort of pathologic classification, I shall not venture now into that difficult and uncertain field. For our immediate purposes it will be sufficient to recognize that most malignant tumors of the ovary and parovarium are carcinomas, with rather rare instances of sarcoma. It seems desirable also to exclude from this discussion secondary and metastatic ovarian malignancies.

Primary malignant ovarian and parovarian tumors are serious for several reasons. They are often insidious in onset, frequently causing no symptoms until a late and sometimes hopeless stage. They often present great difficulties in differential diagnosis, being easily confused with other neoplasms, both benign and malignant, and with still other diseases than those of neoplastic origin. They are often difficult to treat, being sometimes so related to other structures that surgical removal is dangerous, or so constituted pathologically that they are unresponsive to radiotherapy. Finally, they are frequently unpredictable in their course and their prognosis is more often poor than not.

The difficulties of preoperative diagnosis are highlighted by the statistical fact that few malignant ovarian tumors are diagnosed preoperatively. The first requisite in diagnosis is to bear in mind the possibility. It is said (Curtis) that 15% of all ovarian tumors are malignant and in 50% of the cases they are bilateral.

DIAGNOSIS

From the standpoint of diagnosis, the bimanual, vagino-abdominal examination is by all odds the physician's most potent weapon. Because the symptoms of malignant ovarian tumors are so insidious and appear late or not at all patients must be encouraged to have pelvic examination periodically, regardless of symptoms, and to seek examination immediately if any regional symptoms make their appearance. As a corollary, the physician must form the habit of making pelvic examinations in all adult female patients and must familiarize himself with the important features of the examination. In case of inability to accurately outline the pelvic organs by bimanual examination, the patient should be referred to a gynecologist who must employ anesthesia if necessary to accomplish accurate examination and overcome the handicaps of obesity, tense musculature, a small introitus, hypersensitiveness, or any others.

It must be recognized that ovarian malignancy may first evidence itself by symptoms referred to other organs or regulations. Initial bladder or rectal symptoms are not uncommon. Abdominal enlargement due to ascites may be the first manifestation. Indigestion due to widespread peritoneal implants may be primary. A supraclavicular mass may appear early. It is very important to remember that any symptoms or signs may be misinterpreted in the face of a small and easily overlooked malignant ovarian tumor.

Any ovarian enlargement or asymmetry, regardless of the patient's age, but especially in women over forty, is an indication for additional pelvic examinations at two to four week intervals and immediate gynecologic consultation if enlargement persists or increases. Of course, many young women are found with follicular and corpus luteum cysts that can be removed from the shadow of suspicion by careful observation. Probably few greater surgical crimes are committed than the surgical removal of the benign ovary in young women. In most if not all other instances of ovarian enlargement operative exploration is indicated. The risk of operation in such cases is much less than the risk of waiting.

One must not lose sight of the fact that in addi-

*Read as part of the "Symposium on Malignant Growths", offered by the Medical College of Virginia and the University of Virginia, March 22-27, 1948, Richmond.

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tion to bimanual pelvic examination there are certain special examinations that may be of great aid in diagnosis. No physician should be without the vaginal speculum, the proctoscope, and of course the facilities for urinalysis, blood-cell count and smear examination. The gynecologist and others trained in special fields may contribute to the diagnostic data, positively or negatively, by such procedures as cystoscopy, roentgenography, endocrine assays, peritoneoscopy and colposcopy. There is nothing, however, in the foreseeable future to change greatly the fact that most diagnoses must be confirmed finally at operation.

When the female patient consults the physician, a good history is indispensable. Change in menstrual habits, prepubertal and postmenopausal bleeding, vaginal discharges, change in urinary habits and other urinary tract symptoms, change in bowel habits, lower abdominal or pelvic pain or pressure sensations and abdominal enlargement should be specifically inquired into. Any or several of the symptoms referred to may be elicited though it should be stressed again that no abnormalities of sensation, function or form may have been noticed by the patient.

Signs of abnormality at the time of examination of the patient may be minimal or misleading, especially in early cases. Although a malignant tumor of the ovary is usually associated with demonstrable ovarian enlargement, the over-all enlargement may be slight and only increased firmness or nodularity discernible. An ovary that is abnormally firm or nodular or fixed in position should be considered suspicious. In this connection, one must consider confusion with uterine figroids, intraligamentous tumors, ectopic pregnancy, inflammatory masses, endometriomas and various masses extrinsic to the generative tract. The larger ovarian tumors are especially readily confused with uterine fibroids, the pregnant uterus, a full bladder, and hematocolpos.

As already mentioned, if bimanual pelvic examination is not satisfactorily accomplished, plans should be made for gynecologic consultation and the use of anesthesia may be necessary to accomplish satisfactory examination. The vaginal speculum always and the proctoscope frequently should be used in conjunction with bimanual examination. The various special diagnostic procedures already mentioned may be employed as diagnostic aids in appropriate instances.

In later cases and in the far advanced case, the signs are fairly evident and sometimes almost unmistakable. Large, nodular, fixed ovarian masses, widespread pelvic infiltration, masses in the abdomen and fluid in the abdomen, leave little doubt as to the diagnosis. In this connection, however, one must remember that the pelvis and the ovaries specifically may be involved metastatically by malignant tumors outside the generative tract. Endometriosis also may be readily confused with malignancy.

The foregoing factors are the important elements in arriving at a diagnosis, but, as already stated, few malignant tumors of the ovary are actually diagnosed preoperatively. Therefore, it is necessary to formulate some course of action that will prevent indiscriminate exploration but at the same time insure making the diagnosis at the earliest possible moment. The following principles are suggested:

1. Surgical exploration of the pelvis is usually necessary for conclusive diagnosis of malignant ovarian tumors.

2. Operation should be advised without delay in the case of all ovarian masses demonstrated bimanually in female infants and children prior to the onset of menstruation.

3. Limited observation, at two to four week intervals, rather than immediate operation, should be advised in young women with ovarian masses.

4. Observation must be abandoned and operation becomes necessary for diagnosis in young women with ovarian masses that persist or enlarge. In such cases, however, unless a malignant tumor is found at operation, the ovary should be and usually can be conserved.

5. Operation should be advised without delay in middle-aged or older women with ovarian masses.

TREATMENT

All malignant tumors of the ovary and parovarium should be extirpated completely if possible or to whatever degree may be surgically feasible. Many authorities recommend preoperative x-ray therapy and most recommend post-operative x-ray therapy. Endocrine therapy and radio-active isotopes have not yet been assigned a place.

Actually, preoperative x-ray therapy is seldom employed because so few malignant ovarian tumors

can be diagnosed prior to operation. Positive preoperative diagnosis usually means that the tumor has spread by extension or metastasis. Therefore, from the practical standpoint preoperative radiation therapy is seldom feasible.

The operation itself is important. As in the case of malignant disease anywhere in the body the initial operation offers the best and usually the only chance of curing the patient. Radical operations offer the patient the best chance. Both ovaries, the tubes, the entire uterus and the broad ligaments should be removed in a radical block dissection. Any less radical operative technique will subject the patient to greater chances of recurrence and death. Endocrine, sexual, and reproductive functions are less important than the threat to life implicit in the malignant tumor.

In cases in which complete and radical operations are not technically or otherwise practicable, even partial resection of the tumor may be beneficial. By this means radiotherapy may be facilitated, comfort of the patient may be improved, and life prolonged.

Radiotherapy by modern fractional deep x-ray techniques is applicable to those in whom surgical removal of the tumor has been impossible, partial or complete. Response to the therapy is not always predictable and it may vary from imperceptibility to the dramatically miraculous. It is probably worth at least tentative trial in all cases as soon as the patients have recovered from the immediate effects of the operation, usually within a period of from ten days to two weeks.

In the far advanced case the use of palliative measures should be mentioned. Withdrawal of abdominal fluid may be of great importance for the comfort of the patient. Sedatives and other symptomatic measures likewise should be employed as necessary.

While the prognosis of these tumors is generally poor, it can be improved by earlier diagnosis and better treatment. Women must be encouraged to seek periodic pelvic examination, regardless of symptoms and urged to demand immediate pelvic examination when any symptoms first appear. Physicians must perfect themselves in the technique of accurate pelvic examination. Surgeons must perfect their operative technique and roentgenologists their treatment. These methods leave much to be desired but must suffice until such time as a definitive cure for cancer is discovered.

Jaundice.

Jaundice is apparently increasing in importance as a disease which is seen by the general practitioner, says Albert M. Snell, M.D., of the Division of Medicine, the Mayo Clinic, Rochester, Minn.

Writing in the September 25 issue of *The Journal of the American Medical Association*, Dr. Snell points out that number of older persons affected by serious and fatal types of jaundice has increased in recent years and that the frequent use of pooled blood plasma and other blood products has been causative in many specific instances.

It is believed that persons who have recovered from jaundice of the infectious type may carry the disease in their blood and that blood from these persons is a source of infection for homologous serum jaundice. Homologous serum jaundice is the type transmitted in blood or blood products or by contaminated syringes and needles.

Four to 5 per cent of patients who receive pooled blood plasma may have this kind of jaundice within two to four months, Dr. Snell emphasizes. The incidence of the disease following blood transfusions is "definitely less," he points out.

Infectious jaundice, whether transmitted naturally or through blood or blood products, is thought to be caused by a virus. The onset of the disease is usually abrupt, with nausea, vomiting, and fever, according to the article. Relapses of patients with infectious jaundice are frequent and relatively severe, Dr. Snell observes.

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RELATION OF FOOD ALLERGY TO NUTRITION, DISEASE, AND BEHAVIOR IN CHILDHOOD*

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The child must grow from a one cell organism to adult size in the course of a few short years. This growth is most active during the first two years and therefore proper building materials are necessary throughout those years if the infant is to develop and function properly.

Manufacturing, cooking, preserving, etc., often remove or destroy substances required for proper body development and may in some instances, e.g., bleached flour, add toxic factors. Recent experiments have shown that white bread will cause fits in dogs and other animals[1,2]. The obstetrician and pediatrician should know the essentials for proper nutrition and should prescribe as near an ideal diet as possible. They should also be able to recognize the early signs which indicate that some fault in the diet exists. Deficiencies of minerals, fats, proteins, vitamines, etc., produce changes in the structure and function of the body that can be recognized and which should be corrected before severe damage results. Certain foods which contain the essentials for proper nutrition form the basis of the child's diet. If the child gets these foods undestroyed by cooking, etc., and can and will eat them, proper nutrition is easily provided.

Unfortunately, many children react allergically to one or more of these so-called essential foods, and that food then becomes a liability rather than an asset. Failure to recognize an allergic reaction to an essential food means that the child not only suffers from the lack of the needed elements in that food because of poor assimilation, but suffers, too, because what he does absorb acts as a poison. I am sure I have seen scurvy, rickets and anemia produced by poor assimilation of essential food elements which were supplied by the foods to which the patient was allergic.

Cow's milk was intended by nature for the short time nourishment of the calf. It certainly was not designed to fit the human infant's stomach. Pediatricians must be well trained in the art of distorting cow's milk to make it acceptable to the infant deprived of his normal food, as a large percentage of babies now are forced to depend on cow's milk. Most infants get by fairly well with simple modifications, but others are not so fortunate. Symptoms such as colic, nausea, gas, diarrhea, constipation, etc., may occur, and some infants may be so uncomfortable they can sleep only from exhaustion. If to the symptoms of indigestion, additional signs, such as a stuffy nose, or a skin eruption, are added, the recognition of allergy becomes easier. If there is a real distinction between allergic reaction and chronic indigestion, it is difficult to tell where one leaves off and the other begins. It probably is fair to call repeated symptoms of disagreement allergic reaction and designate it one plus to four plus depending on the severity of the symptoms. Milk is the source of fat, most mineral salts, most of the protein, part of the carbohydrates, and a large percentage of the fat soluble and B group vitamins of the infant's diet. Imperfect assimilation of any of these essentials means impaired structure formation and abnormal function of the body. The infant so affected has a decreased ability to cope with infections and other dangers that come his way, and seems more subject to anxiety than the normal child. The picture becomes complete when to the failure of assimilation is added the true allergic reaction which may affect any of the organs or tissues of the body with a wide variety of symptoms.

What has been said about milk is true in degree for other important foods. Orange juice, for example, in recent years has become the chief source of vitamin C. Its virtues only are proclaimed in full page advertisements for all to see. Unfortunately, many persons, infants as well as adults, are allergic to orange juice. Those infants who have softening and flattening of the back of the skull, narrow arched finger nails, and high strung nerves, seem specially likely to be sensitive to orange juice. In sensitive individuals, orange juice may cause gasto-intestinal symptoms, such as nausea, colic, diarrhea, or constipation. There is often a slight

*Read at the Virginia Conference of Social Work, May 7, 1948.

eruption on the face, a crusting of the scalp, and quite often a roughness behind the ears. I have seen several cases of recurrent pyelitis which cleared permanently only after orange juice was eliminated. Recurrent colds and sinus infections often result from allergy to orange juice.

Fish liver oils are now considered highly important in infant feeding because of their A and D vitamin content. Certain amounts of these vitamins are essential to proper nutrition, but the tendency is to supply them in amounts larger than is really needed. A good many infants are allergic to fish liver oils and receive more harm than good from their use. Regurgitation, loss of appetite and disturbance of the bowel function occur frequently in such cases. The odor of fish liver oil is easily detected in the vomitus, and may be detected in the stool of the infant upset by its use. Frequent colds and a harsh brassy cough may be caused by sensitivity to fish liver oils and these can be cured only by eliminating the oil from the diet. Since vitamins A and D are needed by the infant, they should be supplied in such cases from other sources, which fortunately are available, than from fish liver oils.

Allergies to eggs, cereals, fruits, vegetables, meats, etc., are important. Some are easy to detect and others, especially reactions to cereals and products made from cereals, such as corn oil, corn syrups, corn sugars, etc., may be difficult to detect unless carefully sought for.

Symptoms from food allergies vary greatly in different individuals and may vary in the same individual depending on such factors as infection, fatigue, emotional upsets, age, added reactions to other substances, etc. Practically any organ or tissue of the body may bear the brunt of the reaction, but each individual seems to have his own peculiar way of reacting. *Patient A*, for example, may have nausea, abdominal pain, diarrhea, or constipation as his outstanding symptom. *Patient B* may develop a stuffy nose, may sneeze, rub his nose, cough and wheeze. *Patient C* may develop urticaria, any one of several types of eczema, itching of the skin, etc. *Patient D* may respond by becoming ill with a respiratory infection—for example, tonsillitis, bronchitis, and especially sinusitis. These illnesses may follow the ingestion of minute amounts of the offending substance; for example, the amount of milk in a slice of bread or cookie may precipitate symptoms in some cases if the child is highly allergic to milk and has been avoiding the offending food for a while. *Patient E* may have any of the symptoms listed above but is most likely to have constipation and cramps along with convulsions, which could be diagnosed as epilepsy. Abnormalities of behavior such as listlessness, easy fatigue, restlessness, over-activity, stammering, various types of nervousness and inattention often result from food allergy and can be relieved only when the offending foods are eliminated completely. The above list of symptoms is not complete, but is sufficient to reveal the importance of recognizing food allergies when they are present.

The physical examination of allergic patients often reveals a boggy nasal mucosa, a slight puffiness beneath the lower eyelids, enlargement of the tonsils and adenoids and of other lymphoid tissue of the pharynx. The lymph nodes in the neck and at the base of the skull often are found to be larger than normal. These children generally are mouth breathers and noisy, sweaty sleepers.

Diagnosing food allergies and discovering the offending food may be easy in some cases and quite difficult in others. Foods taken only occasionally are often easier to detect when they cause symptoms than are the foods consumed regularly. The history, taken with the possibility of food allergies in mind, and the physical examination may give clues that point to the cause of the trouble. Skin tests for foods are not nearly as accurate as such tests are for pollens and other inhalants and may fail to indicate the chief offender. The real test is by eliminating completely the food in question and later trying that food again. In other words, the proof of the pudding lies in both the eating and not eating. I may add, the results obtained are often dramatic.

SUMMARY

1. Allergy to foods occurs frequently, and the possible participation of allergy should not be ignored in the study of any case.
2. Tolerance to the offending food and the type of reaction vary from patient to patient and even in the same individual under different circumstances.
3. When the offending food happens to be highly important in the child's diet, body structure and function may suffer from failure of

assimilation of the necessary substances normally supplied by that food, as well as from the allergic reaction.

4. Elimination of the offending food and substitution of other sources of the necessary food elements and vitamins is the logical and only really effective treatment for this condition.

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Examinations for Appointment In Navy Medical Corps.

Examinations for the selection of candidates for appointment to the grade of lieutenant (junior grade) in the Medical Corps of the Navy will be conducted at all Naval Hospitals in continental United States during the period April 4-8, 1949.

Graduates of approved medical schools in the United States or Canada who have completed intern training in accredited hospitals or who will complete such training within four months of the date of the examination, and who are physically and otherwise qualified, may be examined for appointment as lieutenant (junior grade) in the Navy Medical Corps. Candidates must be less than 32 years of age at the time of appointment.

Candidates will be required to appear before boards of medical examiners and supervisory Naval examining boards at the Naval Hospital nearest their place of residence to demonstrate their physical and professional qualifications for appointment. Following approval by the President of the United States and confirmation by the Senate, selected candidates will be issued appointment and orders assigning them to duty in a Naval medical facility for active Naval service.

As a result of the authorized additional compensation of $100.00 a month for medical officers, a lieutenant (junior grade) in the Navy Medical Corps receives pay and allowances totalling $5,011.00 a year if married, and $4,575.50 if without dependents.

Detailed information concerning the form and procedure of application may be obtained from the nearest Naval Officer Procurement office or from the Bureau of Medicine and Surgery, Navy Department, Washington 25, D. C. (Attn: Code-3424).

Subacute Bacterial Endocarditis.

Penicillin controls subacute bacterial endocarditis, inflammation of the membrane which lines the heart, in approximately three fourths of patients, report two New York physicians in the November 6 issue of *The Journal of the American Medical Association.*

Subacute bacterial endocarditis usually attacks young persons between the ages of 20 and 30, and it is often preceded by rheumatic fever. Bacteria, attacking the lining of the heart, are usually those of the streptococcus group. Since the lining covers the valves of the heart as well as its inner walls, endocarditis frequently leaves scars which may cause narrowing of one or more valves of the heart or may interfere with their proper closing.

Until the discovery of the sulfa drugs, the disease was nearly always fatal. Treatment with sulfa drugs achieved a cure in about 5 per cent of patients.

The physicians—Albert C. Herring and William M. Davis, of the Medical Service, St. Luke's Hospital—say that they were able to control the infection in 13 of 18 patients treated with penicillin. A four-weeks course of treatment was given to most of the group.

THE PRESENT STATUS OF PARA-AMINOBENZOIC ACID THERAPY IN ROCKY MOUNTAIN SPOTTED FEVER*

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and
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The purpose of this report is to present the *results* of the use of para-aminobenzoic acid (hereafter referred to as Paba) in the treatment of Rocky Mountain spotted fever. Therefore, no effort will be made to discuss in detail the incidence, diagnosis, prevention and supportive therapy. All of these topics have recently been discussed adequately in the literature, and shall only be considered briefly.

Rocky Mountain spotted fever was first thought to occur only in the area for which it is named, but it has since been reported from every section of the United States. Contrary to popular opinion, there is very little variation in the mortality rate in different localities, but there is a marked variation depending upon the age of the people infected. For patients under the age of forty, the mortality is about 12 per cent, whereas, for patients above that age, it is about 40 per cent.[1] The mortality rate for the entire country is approximately 25 per cent.

Usually a history of tick bite (70 per cent) within the previous week may be obtained. The patient usually complains of headache, general malaise, and abdominal pain, followed by chills and fever. Within two to six days, he develops an erythematous maculo-papular rash that begins on the extremities and soon spreads to involve the entire body. Other signs and symptoms that may be present include photophobia, meningismus, edema, splenomegaly, lethargy, delirium, and/or coma. The febrile period is usually two to three weeks, but may vary considerably. Laboratory studies are usually of little help in the immediate diagnosis of the disease. Agglutinations for Proteus OX19 are usually positive in dilutions above 1:80 and the specific complement, fixation test (National Institute of Health, Bethesda, Md.) is usually positive by the end of the second or third week.

*From the Medical Service of Emory University Hospital.

USE OF PABA

Paba was first suggested as a possible treatment for Rickettsial infections, when it was found that the sulfonamides had a detrimental effect on patients suffering from these diseases. Snyder, Maier, and Anderson[2] inoculated mice with murine typhus and administered Paba to part of the group. It was found that 80 per cent of the untreated mice died, whereas 80 per cent of those given Paba recovered. Hamilton, Platz, and Smadel[3] showed that this drug would inhibit the growth of the typhus Rickettsiae in chick embryos. Later, patients suffering with typhus[4] and with tsutsugamushi[5] fever were treated with Paba and were found to have a milder, shorter course with a much lower mortality.

In 1945, Anigstein and Bader[6] inoculated guinea pigs with Rocky Mountain spotted fever and found that 80 per cent of those treated with Paba survived, whereas all of the untreated animals died. Evidence given by these authors indicates that Paba acts by exerting a suppressive, rather than a destructive effect on the Rickettsiae, and this opinion seems to be borne out by clinical response. Little else is known as to the mode of action.

The first report in the literature of a case of Rocky Mountain spotted fever treated with Paba was by Rose, Duane, and Fischel[7] in December of 1945. They concluded that in this single case the administration of Paba was closely followed by a precipitous drop in temperature, and a rapid disappearance of signs and symptoms. A similar response has since been reported by several observers.

In 1946, Flinn and his colleagues[8] reported ten cases treated with Paba and stated that nine "responded dramatically." He found that the average number of days of fever in the treated patients was one week shorter than in those who had not received Paba and states that most of the treated patients showed dramatic clinical improvement shortly after

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treatment began. There was one death and this occurred in a 67-year old man who refused admission until the eighth day of the disease. He had had a previous myocardial infarction and on admission had a blood urea nitrogen of 60 mg. per cent. He died in uremia and at autopsy the kidneys were found to be small, granular, and typical of long standing renal disease.

Greely[9] summarized the results of Paba therapy in children. His report included communications from T. E. Woodward on 13 cases treated with Paba and refers to 6 other cases reported elsewhere in this paper. He concludes that: "In all instances the children who have been treated with Paba and who have recovered, have had shorter milder courses. The rash disappears quickly, and the temperature falls to normal within 2 to 4 days." In Woodward's series, there was one death in a two-year old child in whom treatment was not started until the nineteenth day of the disease.

Eight cases were reported by Tichenor *et al*,[10] 5 by Ravenel,[11] 4 by James and Walker,[12] 3 by Peterson *et al*,[13] and 4 by other observers.[1,14,15,16] They all responded well to Paba except for one patient reported by Peterson and his colleagues. Briefly these authors mention that one of their patients had a fulminating illness, the patient dying 16 hours after admission on the fifth day of the disease.

Dosage and Toxicity

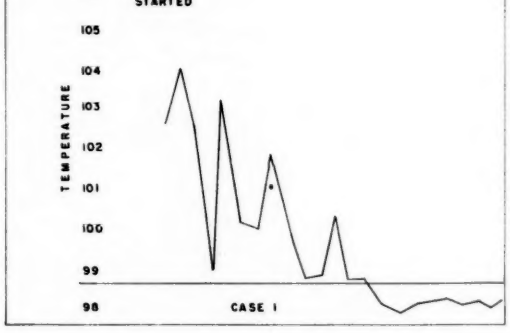
The amount of Paba required varies, but the blood level should be maintained between 20 and 60 mg. per cent. In adults, this level can usually be obtained by an initial dose of 8 grams and then 2 grams every two hours. The drug is rapidly excreted in the urine, making it necessary to give Paba on the two hour schedule. In children it is recommended that daily dosage be figured on 0.5 gram per pound of body weight and then divided into a two hour schedule. In comatose patients the tablets may be crushed and administered by stomach tube. Since the drug is a weak acid, equivalent amounts of sodium bicarbonate should be given at the same time. Tablets containing the sodium salts of Paba are now on the market and have been found satisfactory. Administration should be started as soon as possible since the effectiveness of the drug is markedly increased by its use early in the course of the disease. Its use should be continued for about three days after cessation of fever. The blood level should not be allowed to go over 80 mg. per cent.

Very few toxic effects have been found. Leucopenia and granulocytopenia may rarely occur and the drug should be discontinued if the white blood cell count falls below 3,000. Delirium has been reported, but disappeared when Paba was discontinued.

As in any severe febrile disease, supportive therapy is of the utmost importance. Fluid and electrolyte balance must be maintained and adequate protein and vitamin intake assured. Intravenous and/or gavage feedings may be necessary. Ravenel[11] recently discussed this subject adequately.

Report of Cases

Case 1.—History: A 23-year old woman entered Emory University Hospital on July 15, 1947, with a history of tick bite. Three days prior to admission, she noted general malaise, anorexia, myalgia, chills and high fever, and on the following day had developed a rash.



Physical Examination: Examination revealed a restless, dehydrated, cooperative but obviously ill, young woman with a generalized erythematous maculo-papular rash.

Course: Patient was given 6 grams of paba sodium immediately and subsequently received 3 grams every two hours. A high protein, high carbohydrate diet, vitamins, and a high fluid intake were given. Clinical improvement was noted the following day, and within three days the temperature had dropped to normal. Paba blood level was maintained at about 50 mg. per cent. Proteus OX19

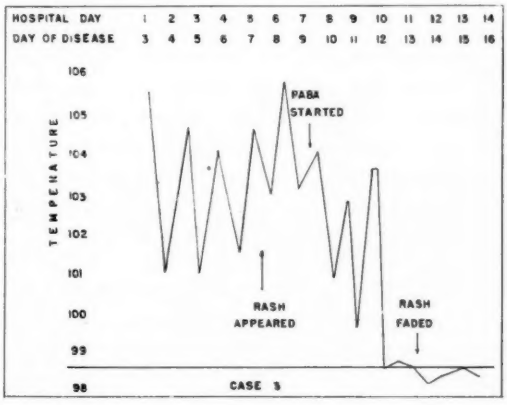
agglutinations were negative on admission, but positive 1:80 six days later. Complement fixation test for Rocky Mountain spotted fever changed from negative to positive 1:8 during these six days.

Case 2.—History: An eight year old girl entered Emory University Hospital on August 7, 1947, with a history of removal of ticks, epigastric pain with nausea and vomiting for seven days, fever and rash for six days. She had not responded to sulfadiazine and penicillin.

Physical Examination: Examination revealed a somnolent, but cooperative girl with typical hemorrhagic rash of Rocky Mountain spotted fever. Spleen was felt 2 cm. below the costal margin. Temperature was 105° F., pulse 130 per minute.

Course: Penicillin was continued and adequate fluid intake was maintained. The next morning she received 3 grams of paba sodium and 1 gram every two hours thereafter. Within three days her temperature returned to normal, and two days later the rash faded. Blood obtained on the second hospital day agglutinated Proteus OX19 in dilutions of 1:20 and on the seventh day was positive 1:1600,, while the specific complement fixation increased from 1:8 to 1:128 in the same period of time.

Case 3.—History: A 6-year old boy entered Grady Memorial Hospital on July 8, 1947, with a



history of tick bite. Headache, chills, and fever had been noted for 2 days and mental confusion for 1 day. Temperature was 105.5° F.

Physical Examination: Examination revealed a dehydrated boy with slight stiffness of neck, cloudy sensorium, and abdominal tenderness. White blood cell count was 5,800.

Course: Patient was given fluids, penicillin, and sulfadiazine after studies gave only normal reports. On the seventh day of illness, he developed an erythematous maculo-papular rash. During this time he had developed edema of the eyelids, wrists, and ankles, temperature had ranged between 101° to 105° F., and he had become irrational. Two days after the rash appeared he was given 6 grams of paba and thereafter received 2 grams every 2 hours. Within 3 days, the temperature dropped to normal and remained there. General condition was markedly improved and rash disappeared within 4 days. Paba blood level was 17 mg. per cent, so dosage was increased to 2.5 grams every 2 hours, producing a level of 23 mg. per cent. Patient's serum did not agglutinate Proteus OX19 on admission, but was positive in dilutions of 1:80 two weeks later. Complement fixation test for Rocky Mountain spotted fever was positive 1:4 one week after admission and 1:128 two weeks later.

Case 4.—History: a 34-year old woman entered Crawford W. Long Memorial Hospital on August 14, 1947, complaining of headache, fever, anorexia, and general malaise of 3 days' duration, nausea, vomiting and rash for one day. Sulfadiazine had been given, but no response was noted.

Physical Examination: Examination revealed a dehydrated, pale woman who appeared very ill. There was slight abdominal distention and a maculo-papular erythematous rash was noted over the extremities. White blood cell count was 4,080.

Course: Patient was given penicillin, vitamins, and oral and intravenous fluids. The rash spread to the body and the temperature remained at 102° to 103° F. Administration of paba, 3 grams every 4 hours, was begun 3 days after admission. Two days later the temperature fell to 100° F. where it remained for 4 days before returning to normal. Agglutinations for Proteus OX19 were negative on admission and on discharge, but the complement fixation test on blood drawn the day before discharge (fourteenth day of disease) was positive in dilutions of 1:128.

Case 5.—History: A 4-year old boy was admitted to Crawford W. Long Hospital on July 7, 1947, with a history of removal of ticks, epigastric pain with anorexia for nine days, photophobia, fever, and rash for eight days.

Physical Examination: Patient was conscious,

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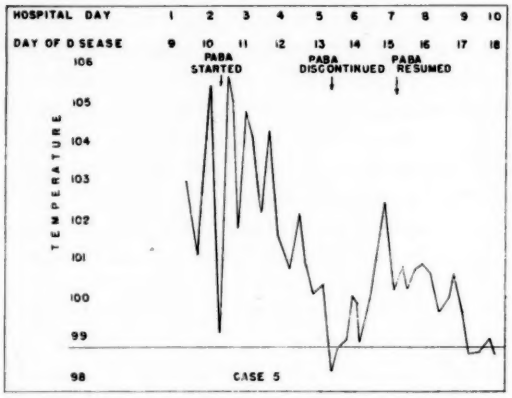
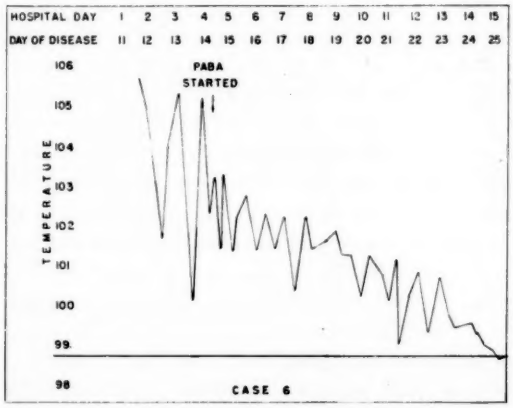
but was restless and dehydrated. He had a typical generalized hemorrhagic rash of Rocky Mountain spotted fever and a definite photophobia. Temperature was 103° F.



Course: Fluids were given parenterally and orally, and penicillin therapy was begun. The next day he was given an initial dose of 4 grams of paba sodium, and subsequently received 1 gram every hour. Temperature dropped rapidly to normal after three days of treatment, and paba was discontinued, since blood level at this time was 74 mg. per cent. The day after paba was discontinued the temperature began to rise, so paba therapy was resumed for four days, at which time the temperature had returned to normal. Proteus OX19 agglutination was negative on admission, but was positive 1:640 eight days later.

Case 6.—History: A 4-year old girl was admitted to The Henrietta Egleston Hospital for Children on June 18, 1947, with a history of tick removal. She had a sore throat, headache, and diarrhea twenty-four days before admission, but symptoms disappeared. Eleven days prior to admission she developed epigastric pain, diarrhea, and general malaise. The following day a high fever and rash were noted. She did not respond to penicillin and became comatose two days before admission.



Physical Examination: Patient was dehydrated and comatose and would not respond to stimuli. There was a generalized hemorrhagic maculo-papular rash. Rales were heard in the left lung base. Heart rate was rapid and rhythm was irregular. Spleen and liver were felt just below costal margins. Kernig test was positive bilaterally. Temperature was 105.8° F., white blood cell count was 29,100, and red blood cell count was 2,820,000. Lumbar puncture revealed normal spinal fluid pressure and a white blood cell count of 128. The serum protein level was 5 grams per 100 cc.

Course: Amigen, vitamins, transfusions, and 1/6 M Ringer lactate solution were given, and the next day she was able to take some fluids by mouth. Her condition remained about the same in spite of this therapy, and on the fourth hospital day she was placed on a regime of 1.5 grams of paba sodium every two hours. Penicillin therapy was begun because of evidence of pneumonia in left lung base. Temperature dropped to 101° F., and patient appeared somewhat better. Five days later it was noted that the patient was much more rational and general condition was greatly improved. Paba blood level was maintained between 24 and 55 mg. per cent. She continued to improve, and two weeks after admission she began to eat well and would respond to directions. Gradual clearing of sensorium was noted, but on discharge (one month after admission) there was some aphasia. When seen one month later she appeared in good physical condition, but parents stated that she still could not say a few words. On admission, agglutinations for Proteus OX19 were positive 1:5280, and two weeks later the compliment fixation test for Rock Mountain spotted fever was positive 1:512.

Case 7.—History: A 4-year old girl was admitted to the Henrietta Egleston Hospital for Children on June 30, 1947, with a history of tick removal. She had had epigastric pain, fever, and general malaise for six days and rash for four days. "Was talking out of her head" the day before admission.

Physical Examination: Examination revealed a slightly dehydrated, drowsy girl who appeared to be acutely ill. There was a generalized macular erythematous rash, most marked over the extremities, and moderate abdominal distention. Temperature was 105° F.

Treatment: Paba therapy, 2 grams every two hours, was begun immediately. The temperature dropped rapidly to normal within three days. However, the level of paba in the blood had risen rapidly to 250 mg. per cent, so the drug was discontinued at this time. Three days after paba was discontinued, the temperature rose to 103° F., but patient showed so much clinical improvement that paba was not resumed, and temperature soon returned to normal. In spite of high paba blood level, there was no leukopenia or granulocytopenia, although patient did have increased nausea and vomiting during that time. Proteus OX19 agglutination was negative on admission, but ten days later was positive 1:640. On discharge the complement fixation test for Rocky Mountain spotted fever was positive 1:128.

These case reports were of necessity made as brief as possible. Negative blood cultures, urinary findings, and other negative reports were not included. The white blood cell count usually ranged between 12,000 to 15,000. A slight normachromic anemia occasionally developed late in the disease. The rash referred to in these histories was characteristic, starting on the extremities and quickly spreading to the body, but in two cases it was first noted after it had become generalized. It was noted that the rash usually became very prominent when the temperature spiked to a high level, but would become faint during intervals when the temperature would fall.

It is interesting to note a few complications of therapy in these cases. In *Case 5,* paba was discontinued too early and had to be resumed when fever again occurred. In *Case 6,* treatment was not started until fifteen days after onset of disease, at which time the patient was comatose, and paba therapy was not as effective as in other cases. In *Case 7,* dosage was too large for a four-year old child, and paba blood level rose rapidly to a very high level, but the only toxic signs observed were nausea and vomiting. Supportive therapy in these cases is not discussed at length, but the part that it plays is of vital importance and must not be underestimated.

Five other cases will not be reported in detail since the information on them is not as complete. All five were adequately treated and four of them responded dramatically. In three of the cases, the temperature returned to normal within four days. The fifth case was a 34-year old man who died twelve days after onset of disease. Paba therapy was begun three days before death and an adequate blood level of the drug was maintained for at least the last two days. Agglutinations for OX19 were negative at this time, but since they are often negative until the end of the second or third week, and since he presented a typical clinical picture of Rocky Mountain spotted fever, we feel that his case should be included.

Thus, in our series of twelve cases, there was a mortality rate of 8 per cent. In the majority of these cases, the temperature returned to normal within four days after the initial dose of paba.

COMMENT

The 48 cases from the literature and the 12 cases just reported show an almost uniformly good response to paba treatment. There were 4 deaths: a 67-year old man with complications due to severe cardio-renal diseases, a 2-year old child started on paba 19 days after the onset of disease, a child who died 16 hours after admission, and a man who died within 3 days after therapy was begun. This gives a total of 4 deaths in 60 reported cases, a mortality rate of 6.7 per cent. However, it should be noted that cases reported from the literature may show a lower mortality rate than if all the cases were from a single large series. For example, the first reports on sulfonamide treatment of pneumococcal meningitis showed a mortality rate of only 31 per cent, but later reports from a series by Dowling *et al*[17] gave a mortality rate of 80 to 90 per cent. It was the opinion of these authors that the discrepancy was due to the fact that earlier reports obtained by summarizing the literature had included the many isolated cases, or small groups of 2 or 3, and that successfully treated cases had been published, whereas unsuccessful cases had not been reported in the literature. However, it does not seem that our report will be quite so open to criticism since all but eight of these cases are from groups

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of four or more, and forty-three of them are from series of at least eight cases. In addition, it should be noted that in the cases that recovered, clinical improvement was generally evident in 24 to 48 hours after beginning paba therapy, and the duration of fever was about one week shorter than that reported previously. The uniformity of these results are very significant and are not as likely to be questioned.

Heretofore, most of the articles on paba therapy of Rocky Mountain spotted fever have presented only a small number of cases and have concluded that they obtained a very satisfactory response, but that the cases were too few to be conclusive. We feel that the evidence presented in these 60 cases strongly indicates that paba is now the drug of choice in the treatment of this disease.

SUMMARY

1. Twelve cases of Rocky Mountain spotted fever treated with paba are reported.

2. Forty-eight cases from the literature are summarized and paba therapy is discussed.

3. In these sixty cases there is a mortality rate of 6.7 per cent.

4. Clinical improvement was usually noted in 24 to 48 hours after beginning paba therapy, and the duration of fever is about one week shorter than in patients who did not receive the drug.

These case studies were made through the cooperation of the Henrietta Egleston, Crawford W. Long Memorial, Grady Memorial, and Emory University Hospitals and through the courtesy of the following physicians in submitting the case records of their patients for analysis: H. Homer Allen, G. A. Duncan, W. A. Mendenhall, and A. A. Weinstein.

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PREGNANCY COMPLICATED BY PRIMARY TORSION OF A NORMAL FALLOPIAN TUBE

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Primary torsion of a normal Fallopian tube (not associated with pregnancy) has been reported by Martin A. Howard and Bland-Sutton. Darner and Anspach also have reported cases, the majority of which accompanied previous adnexal pathology; however, the literature indicates that primary torsion of a normal tube accompanying advanced pregnancy is an extremely rare entity.

In the case reported the diagnosis was not made before surgery, and, although an ovarian cyst with a twisted pedicle was considered, the absence of a palpable mass above and pelvic examination within normal limits did not lend support to this diagnosis.

CASE REPORT

W. F., age 24, was admitted to the Winchester Memorial Hospital because of pregnancy (7 months) complicated by pain in the right lower quadrant of the abdomen. The pregnancy had been normal and uneventful until thirty-six hours before admission when she began to have persistent pain in the right lower quadrant. The pain was described as being constant but of moderate severity until twelve hours prior to admission when it became quite acute and was not relieved by hypodermic medication when seen at that time by Dr. J. D. Brown. There were no symptoms suggesting premature separation of the placenta, renal complications, etc.

Physical examination at the time of admission revealed a well developed and well nourished white female, unable to lie quietly because of excruciating pain in the right lower quadrant of the abdomen. T. 99, P. 90, R. 20. Examination of the abdomen revealed a normal pregnancy of seven months duration, acute tenderness and spasm of the right lower quadrant of the abdomen and no induration or swelling. Other physical findings were within normal limits and pelvic examination was negative. B.P. 110/80.

Laboratory findings: RBC-3,640,000; WBC-11,050; Hbg. 72%; Polys-81; Lymphs-19; Eagle-negative.

Urinalysis—Amber, acid, 1.014, Hazy, albumin-trace, sugar-negative, 6-8 WBC per HPF.

Operation: Under spinal anethesia the abdomen was opened through a McBurney incision. The right Fallopian tube was found to be twisted, gangrenous, and distended with serosanguineous fluid. The ovary and appendix were grossly normal. Operation consisted of a right salpingectomy. The ovary and appendix were not disturbed. The patient made an uneventful recovery and was discharged from the hospital on the tenth post-operative day. She was delivered normally of a living child at term.

SUMMARY

Primary torsion of a normal Fallopian tube occurring during advanced pregnancy with accompanying alarming symptoms has been presented. Convalescence following removal of a gangrenous tube was uneventful and the patient progressed normally to term and delivered normally at that time. The appendix was not removed, as it was believed that a minimal amount of operative intervention would be less likely to precipitate a premature labor.

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A CASE OF ANURIA DURING COMBINED SULFONAMIDE THERAPY*

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and
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Numerous cases and series of cases[1,2,3,4] of renal complications due to sulfonamide crystalluria have been reported. This complication has been emphasized and re-emphasized as being a very serious one, often proving fatal. Nevertheless, it is felt that this group of drugs is still being used indiscriminately at times without the proper selection of cases and for the more minor ailments.

It is felt that the following case warranted the use of the sulfonamides, but from time to time such a case should be reported as a reminder that even with the use of the more soluble sulfonamides and their combinations, which are said to be even more soluble than when used alone,[5] varying degrees of oliguria and anuria can and do occur.

Serious reflection of the advantages and disadvantages of these drugs should be made each and every time they are used.

CASE REPORT

C. H. G., a 23 year old white male, was admitted to the hospital on September 16, 1947, with the chief complaint of "sore throat" of 48 hours duration. Complaint was limited to the left tonsillar region. He stated that he had been unable to chew or swallow food for 24 hours.

Physical examination revealed the temperature, pulse, and respiration to be 102°—110—21, respectively. Exquisite tenderness was present over the left side of the neck and mandible. The left anterior cervical lymph nodes were enlarged and tender. Both tonsils were enlarged, injected, and cryptic. The pharynx about the left tonsil appeared indurated and injected.

Laboratory studies revealed the urine to be normal, hemoglobin 94% (13.6 grams), w.b.c. 11,700, and the differential white count was 16 lymphocytes, 2 stab neutrophiles, and 82 segmented neutrophiles.

The patient was given sulfamerazine and sulfadiazine grains 30 each initially and grains 15 every four hours thereafter. 30,000 units of penicillin intramuscularly every three hours was also begun.

Therapy was begun at 5 P. M. September 16. The next morning the sulfa level was 7.35 mg. per cent. At about 6 A. M. September 18 (after 7 doses of the sulfonamides including the initial dose) the patient noticed that while urinating the stream suddenly ceased and exquisite pain developed in the penis and scrotum. A few drops of grossly bloody urine appeared.

A diagnosis of sulfonamide crystalluria was made. An intravenous infusion of 1,000 cc. of 3% sodium bicarbonate solution was given followed by 1,500 cc. of 5% glucose. Sodium bicarbonate grains 20 every four hours was also started. Morphine was given for pain.

That evening 1,000 cc. of 3% sodium bicarbonate solution was again given intravenously. The patient was cystoscoped and sulfonamide crystals could be seen extruding from both ureteral orifices. The ureters could not be catheterized because of the obstruction.

Intravenous infusions of glucose were continued as the patient was nauseated, vomited a great deal, and became drowsy. The blood urea-nitrogen was 14 mg. per cent, however.

On September 20, around 1:30 P. M., after about 55 hours of anuria, the patient voided and continued to void regularly until discharged. Nausea, vomiting, drowsiness, and pain subsided almost immediately after urination was again normal. The blood urea-nitrogen was 15 mg. per cent the morning of September 20. The sulfa level was not repeated.

An intravenous pyelogram being normal, the original complaints having subsided, the patient was discharged on September 25, 1947.

SUMMARY

1. A case is reported in which a patient on routine dosage of sulfadiazine and sulfamerazine developed anuria and became critically ill due to crystalluria.

2. It is felt that this is a good reminder that

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sulfonamide therapy can produce serious complications, and should, therefore, never be used indiscriminately.

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DOUGLAS, JOHN (d.1759): A Short Account of the State of Midwifery in London, Westminster, etc. London: Printed for and sold only by the Author in *Lad-Lane,* near *Guild-Hall* MDCCXXXVI.54 1.,75 (1) p. 18 cm.

——: A short dissertation on the Venereal Disease, London.

——: Lithotomia Douglassiana, *London*: *printed for C. Rivington,* 1723. 126 p. 22½ cm. (M.L.)

This little treatise on the State of Midwifery in London and Westminster by the Edinborough Lithotomist who practiced in London, gives a good insight into obstetric conditions at the time when the obstetric forceps first made their appearance. He objects to the term man-midwife and proposes the term mid-man for a male accoucher. He is emphatic in his statement that Chamberlen's translation of Mauriceau and the treatises of Gifford and Chapman are merely bids for opportunities to use their secret nostrums. As a remedy for the ignorance and incapacity of the midwives of which these authors complain, he proposes a hospital for poor lying-in women where young midwives can be taught by surgeons, and not by physicians, apothecaries and the lowest class of surgeons. Until such hospitals can be built and endorsed a midman should be appointed in every city, or county-town in England to instruct all midwomen.

There were many Douglas' who wrote on obstetrics and kindred subjects in the 18th Century. William Douglas attained notoriety as a critic of Smellie. Andrew Douglas wrote on rupture of the uterus, James Douglas, anatomist and man-midwife, after whom *Douglas' pouch* was named, was a brother of our author. *Another Douglas,* (John C.) wrote on *spontaneous evolution of the fetus* which was published in Dublin in 1819.

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PULMONARY TULAREMIA WITH REPORT OF TWO CASES

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Tularemia is described as an infectious disease caused by the Bacterium Tularense. It is widespread in nature in a variety of animal and insect hosts, 20 of which are proved sources of human infection, though wild rabbits and hares are chiefly responsible for the disease in man. Blood-sucking insects—lice, flies, ticks, and fleas—transmit the infection from animal to animal in nature. Rabbits raised under domestic conditions have never been found naturally infected[1].

Four clinical types have been described[1]:

1. The *ulceroglandular* type—in which the primary lesion is a papule of the skin, which later becomes an ulcer and is accompanied by enlargement of the regional lymph glands.

2. *Oculoglandular* type—in which the primary site is a conjunctivitis, and is accompanied by enlargement of the regional lymph glands.

3. *Glandular* type—in which there is no primary lesion at the site of infection, but there is an enlargement of the regional lymph glands.

4. *Typhoid* type—in which there is no primary lesion and no regional glandular enlargement.

The *pulmonary* form, to which the main part of this paper is devoted, may occur with the other forms, such as the ulceroglandular or the typhoid forms.

The incubation period of tularemia is usually 3 days, and rarely exceeds 5 days. Although it is most often transmitted by skinning, cleaning, or eating improperly cooked rabbits, tick-borne infection is a definite source. Willard & Ruffin[2] report a tick-borne epidemic of 50 cases of tularemia among soldiers in the Tennessee maneuver area from March to December 1945. Of these cases, 32 were from tick bite, 5 from rabbit infection, and 13 from unknown sources, probably contact with tick Forty-nine of these patients recovered, one died Eleven of the 50 were of the pulmonary form; the one death was in this group.

*Mr. Crowder is a fourth year medical student at the Medical School of the University of Virginia, and served as a student externe at the Lynchburg General Hospital during the summers of 1947 and 1948.

The diagnosis of tularemia[2] is confirmed by 3 tests: one is by growth of the organism from the blood or pleural or spinal fluid or blood cysteine agar medium, the second by inoculation of guinea pigs with this material, and the third by repeated serum agglutination tests. The agglutination test is regarded as one of the most reliable confirmatory tests in the field of serology. It is usually positive after the first week; a progressive increase in the titer is diagnostic. Ransmeier and Ewing[3] have shown that a positive tularemic agglutination titer may persist for a number of years.

One of the most complete and interesting articles on pulmonary tularemia is that of Blackford and Casey[4] of the University of Virginia in 1941. After their review of the literature, it was their belief that the infection reaches the lung through the skin or intestinal tract and not through inhalation, as some believe. Blackford draws attention to the close morphological resemblance between caseous pneumonia of tularemia and tuberculous pneumonia. Pleural effusion and spontaneous pneumothrax may occur in either. The fundamental lesion in the lung in persons with tularemia is focal necrosis either in the substance of the lung or in the pleura. Around these areas of focal necrosis there are lymphocytes, plasma cells, and even polymorphonuclear leukocytes, and it is readily seen how these lesions resemble tubercles.

Blackford and Casey report 95 of tularemia, and of these pneumonia was found in 20 cases, pleural effusion in 13, and bronchitis in 19. The types of infections were grouped according to Francis' classification as follows: ulceroglandular—63 cases, typhoid—21 cases, glandular—7 cases, and oculoglandular—4 cases. Whereas most of the inoculations were accounted for by rabbits, a few apparently resulted from contact with ticks, squirrels, opossums, weasels, and cats. Ulcers or enlarged lymph nodes were the chief complaint of the majority of the patients, but the presenting symptoms covered a wide range. The mortality rate for the series was 10.5%, and 7 necropsies were obtained

on the 10 fatal cases. Some type of x-ray abnormality was found in 90% of Blackford's group.

Prognosis: Before streptomycin, the overall mortality rate of tularemia was about 10%; with the pleuropulmonary form it was much higher. Bronchitis alone does not appear to increase the mortality over the cases in which no clinical evidence of bronchitis was found. Blackford had a 30% mortality in his patients with tularemic pneumonia or pleural effusion. Stewart and Pullen[11] of New Orleans had a mortality of 57% in 15 cases.

Before streptomycin, any treatment other than supportive treatment was of doubtful value. Sulfonamides were tried without success. Foshay's serum was used, but nothing definite was decided on its value. The report of his own cases is not convincing. Loria reported the use of intravenous acriflavine in 3 cases with recovery, and he attributed the recoveries to the drug.

W. W. Jackson of Hot Springs, Arkansas[12], gives Bismuth Sod. Tartrate in 2% aqueous solution (G. D. Searle & Co.) 1 cc. daily (IV) and compares his 203 cases with no mortality against the 13 reported cures with streptomycin at that time. However, in his only patient with tularemic pneumonia, it was necessary to use streptomycin in addition to the Bismuth Sod. Tartrate.

Since the discovery of streptomycin, all the other methods of treatment except the usual supportive treatment can be abandoned. This drug is described as "most effective in the treatment of tularemia" by Keefer[6]. He states that in 67 cases, 63 recovered, 55 immediately in a striking manner, 8 in a gradual but definite way with permanent cure. Three cases were unaffected, but in two the diagnosis was questionable, and the total dose was less than 3 Gm., and in all 3 the treatment was begun over 2 months after the onset of symptoms. Nearly every patient was treated with 1 gm. daily for 7 days. Eleven of the patients had pleural and pulmonary forms of tularemia. Nine recovered, 1 improved, and 1 died on the first day of treatment. The majority of cases had been treated previously with sulfonamides and penicillin. These results are confirmed by others[7,8,9,10].

CASE REPORTS

CASE 1. G. L., colored female, age 13, was admitted to the Lynchburg General Hospital July 7, 1947, with complaint of fever and cough. She had been well until four days before admission, when she suddenly developed a severe headache; the next day nausea and vomiting appeared, and a rather severe, dry cough also set in. The following day (two days before admission) a fever was first noted and cold sensations, chilly sensations, were also noted. The cough became productive, but there was no hemoptysis. Patient received 3 or 4 injections of penicillin (amount ?) by her physician and, as she did not improve, was sent to the hospital.

Past history and family history were essentially negative. There was no history of skinning or eating rabbits or squirrels, and there was no history of tick bite, although ticks were abundant in the part of the country where she lived.

PHYSICAL EXAMINATION revealed an acutely ill, dehydrated, toxic negro child of 13. T. P. R. 104°—120—56. B. P. 100/40. There was no nuchal rigidity and no rash. *Pharynx* was slightly reddened. *Conjunctivae* were not injected. *Heart* was not enlarged, both heart sounds were heard, regular, rapid, no murmurs. *Lungs* showed dullness at left base and numerous crackling rales all over left side of chest, both anteriorly and posteriorly. Breath sounds were distant over left side of chest, but no bronchial breathing was heard. *Abdomen* was not distended. *Extremities* were normal.

LABORATORY STUDIES: *Urine*—amber, slightly cloudy, sp. gr. 1.020, acid in reaction, albumen trace, sugar negative, microscopic examination of the sediment revealed an occasional pus cell. *Blood*: RBC—4,150,000; WBC—9-700 Hbg. 9.2 gm. Differential—PMN 71%, SL 26%, LL 3%. Wassermann negative. Test for sickle cells—negative. *Sputum* on 2 examinations showed no tubercle bacilli. *X-ray examination* on July 10, 1947, showed "extensive soft-tissue clouding over the major portion of the left lung, which is a pneumonia, probably of a virus type. The right lung is normal." (Fig. 1.)

COURSE: Patient was given an intravenous infusion of 5% glucose in normal saline solution, and penicillin 50,000 units every 3 hours was begun. This was increased to 100,000 units every 3 hours on July 8, 1947. However, the patient failed to respond to this treatment; her temperature rose (see chart) and she remained ill. On July 10, 1947 streptomycin therapy was begun and agglutination test for tularemia was taken. It was reported positive on July 15, 1947, in dilution of 1-100, other agglutination tests were negative. The dosage of

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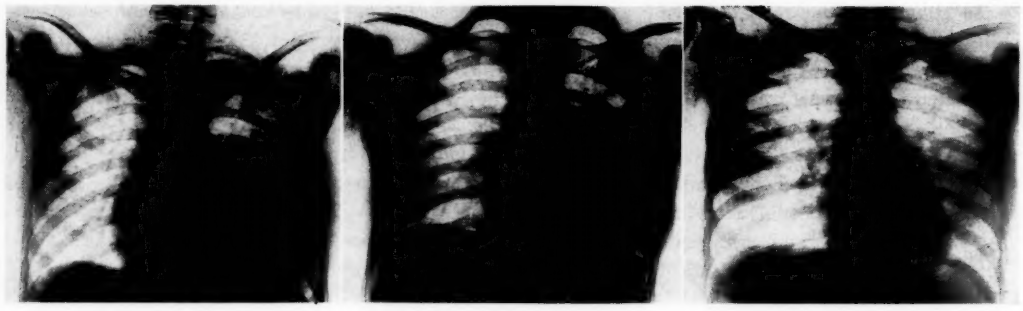


Case 1—G.L.

streptomycin was 1.6 gm. daily (in 0.2 gm. q 3 h doses) and was continued until July 16, 1947, when the patient's temperature rose to 103.8° without any apparent cause. Even though the patient seemed to be doing well clinically, it was decided to raise

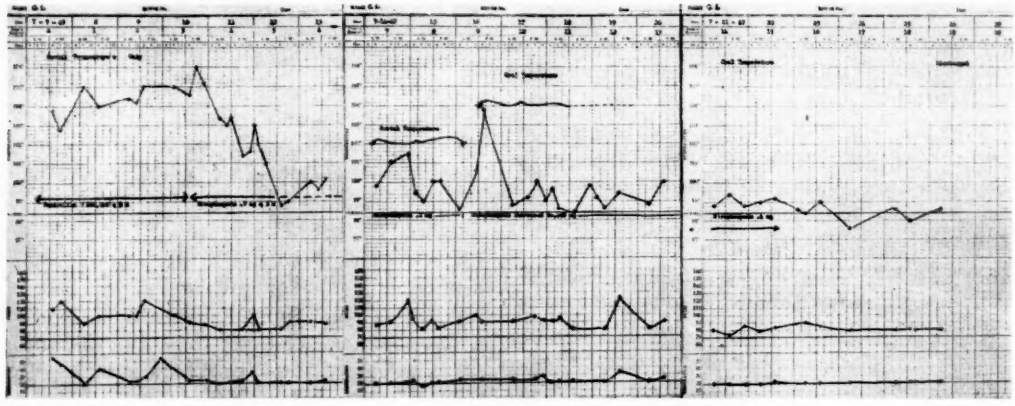


Chart 1—G.L.

the dosage to 3.2 gm. daily. This was continued until July 23, 1947, when the drug was discontinued.

The improvement of the patient under streptomycin therapy was as apparent as the temperature curve. She became alert, no longer appeared toxic, ate well, sat in a chair, etc. Her X-ray plate on July 14, 1947, showed "50% less clouding in the left lung", and on July 19, 1947, showed only "a small part of the original clouding remained". The blood agglutinations on July 22, 1947, were positive for tularemia in dilution 1-800. The patient remained afebrile after streptomycin was discontinued and was discharged home on July 26, 1947.

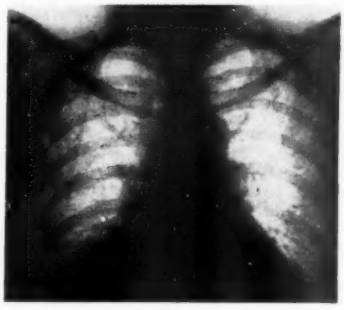
CASE 2. Mrs. A. C. A., was a 47 year old white woman who was referred to the Virginia Baptist Hospital from a neighboring town by her physician with complaint of pain in right side of chest. P. H. was negative except that the patient had had two admissions to mental institutions requiring shock treatments and 2 gynecological operations.

PRESENT ILLNESS began on October 12, 1947, one week before admission, with backache and pain down both legs, dull headache, fever and malaise. Two days later she developed a slight cough and "a catch" in the right side of chest on deep or moderate inspiration. There was no history of tick bite, eating or skinning or handling rabbits.

PHYSICAL EXAMINATION showed a well-nourished and developed white woman appearing acutely ill. B. P. 120/70. No petechiae and no skin rash. No nuchal rigidity. No jaundice. Pharynx and tonsils were reddened, but no exudate was seen. No lymphadenopathy. Chest and lungs showed an apparent catch with pain on breathing on right with diminished breath sounds and crackling rales at right base. *Heart* was not enlarged, both heart sounds

heard, regular, no murmurs. *Abdomen*: Two lower mid-line scars. No masses felt. *Pelvic* and *rectal* not done. *Extremities* showed no clubbing of the fingers.

LABORATORY STUDIES: October 20, 1947, *urine* (cath.) 1.015. Acid reaction, heavy cloud albumen, no sugar, no acetone. Microscopic showed many granular casts. *Sputum* (October 20, 1947) no acid-fast bacilli found. October 20, 1947, Hbg. 87%. RBC—4,410.00. WBC—10,300 with 81% Polys, 10% SL, 8% LL, 1% E. October 24, 1947—similar count—Hbg. 85%, RBC 4,570,000, WBC 10,000 with 79% Polys, 17% SL, 4% LL. X-ray on October 19, 1947, showed the right diaphragm 1 inch higher than normal and bronchovascular markings above it somewhat accentuated. Lung fields elsewhere normal, and heart size and shape were normal. Penicillin was begun on day of admission



Case 2—A.C.A.

—October 19, 1947—after a blood culture was taken, dose 100,000 units q 3 h.

October 21—High fever continued. Absent B. S. and flatness at right base.

October 23—High fever continued. Pain in chest worse. Agglutinations taken October 23, 1947—reported positive 1-50 on October 28, 1947.

October 24—Another chest x-ray with fluoroscopy shows right base obscured by extreme denseness to level of the hilum, which is probably fluid.

October 24—Right chest aspirated, 500 cc. straw-colored fluid removed. Culture taken—negative. Penicillin discontinued.

October 27—130 cc. straw-colored fluid removed —50,000 units penicillin inserted into chest cavity.

October 30—Agglutination report positive 1-50 Tularemia—recheck requested. Streptomycin 1.2 gm. daily begun. History of exposure re-checked—negative.

November 4—Clinical appearance much better as soon as streptomycin begun. Agglutination positive 1-200 at this time.

Streptomycin discontinued on November 5, and patient allowed out of bed. Discharged home on November 8, without any signs in chest.

I had believed this patient to have a tuberculous pleural effusion and did not think of tularemia until the agglutination test returned positive.

CONCLUSION: Two cases of pleuropulmonary tularemia are reported, both treated with streptomycin. It is believed that the drug saved the first patient, and while it was withheld until the second patient was improving spontaneously, it greatly hastened the recovery. It is urged that tularemia be suspected in all acute pulmonary conditions, and where the response to penicillin is neglible that agglutination tests be taken and streptomycin therapy be begun before agglutination tests can be reported.

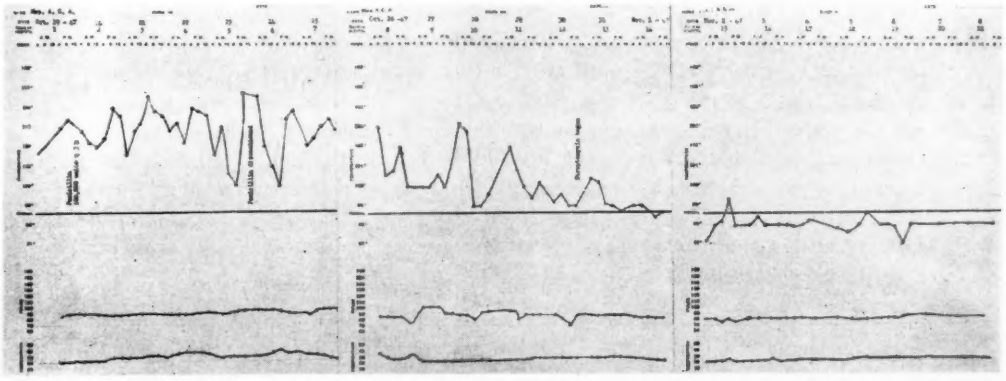


Chart 2—A.C.A.

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Floral Eponym

BRICKELLIA

BRICKELL, JOHN, FL. 18TH CENTURY

GRAY says Brickellia is named for Dr. John Brickell of Georgia, correspondent of Elliott and Muhlenberg. Norman Taylor in the Standard Cyclopedia of Horticulture says that Dr. John Brickell was an early American naturalist. Kelly complains of being able to find little biographical data about him stating that he died in 1810, aged about ninety.

There was a Dr. John Brickell of North Carolina. He is thought to have been an Irishman. He practiced medicine in Edenton, North Carolina, and in 1730-31 was one of a party of ten who with two Indian servants went on an exploring expedition to the West. They provided themselves with guns, ammunition, horses, compasses, rum, salt, pepper and corn. They were received with great friendliness by the Indians but stayed with them only two days as the savages were about to drink up all their rum. Proceeding Westward they crossed one ridge of mountains and came to another. They saw few Indians in this section. Brickell wrote two books, *Natural History of North Carolina*, 1737, and a *Catalogue of American Trees and Shrubs Which Will Endure the Climate of England*, 1739.

Brickellia is a genus of about 40 species of herbs or small shrubs found in the warmer parts of the United States and Mexico. B. grandiflora is commonly called the Tassel Flower.

UNIOCULAR HYSTERICAL AMAUROSIS

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Hysteria is the thief of medicine. It can steal the symptoms of any disease, symptom complex, syndrome or ailment and make them its own. Furthermore, it can so influence the metabolism of the part that sooner or later, if the process is allowed to continue, physical changes will take place that will substantiate the disease.

ETIOLOGY

The etiology of hysteria is protean. Usually an easily impressed girl with an unstable nervous system receives a shock of some sort, physical or psychic, an automobile accident, a death of a near relative, a disappointment, amorous or otherwise, from which the only exit is fight or flight. As she cannot either fight or fly, sublimation of the desire for flight takes place in the snapping of the constitutionally weakened vital threads and paralysis takes place, or blindness, anorexia, neurasthenia, psychasthenia, deafness, tachycardia, alexia, mutism, apraxia, or the whole long list of physical and mental ails to which the human frame is heir.

However, it is not only the female sex that is susceptible. It affects both sexes and all ages and will result from anything that gives rise to extreme emotional reaction. The late World War gave rise to innumerable cases in young men who were suddenly jerked out of the routine complacency of civilian life into the maelstrom of war with its media of mud, squalor, filth, obscenity, sickness, accident, sudden death and mass murder.

The element of compensation in accident cases increases the percentage of nervous affections, not the least of which is hysteria.

DIAGNOSIS

Diagnosis is difficult because of the complexity of diseases and injuries that hysteria can simulate. Malingering is especially confusing, although the malingerer is essentially an actor and in the case of simulated blindness the malingerer will pull his hat down over his eyes and put on smoked glasses, assume a cane for assistance in walking and his camouflage is complete, while the hysterical blind assumes no artificial postures, sees nothing and cares less, his hysterical phenomena being purely the result of inhibition. Hysteria does not always strike well persons. He may be suffering from any disease or multiple diseases and he must be examined carefully for evidence of real disease before the element of simulation is given consideration. There may be variations in the loss of sight from a slight loss of vision to unilateral or bilateral amblyopia or amaurosis, while there may be other conditions present, including conjunctivitis, asthenopia, ptosis, nystagmus, lacrimation, blepharospasm, strabismus, internal or external, unilateral or bilateral ophthalmoplegia.

FIELDS

The hysterical fields may assume any form. There may be no fields at all in complete blindness, contracted fields, hemianopsia, scotomas, tubular fields, oscillating fields where an object may appear and disappear haphazard in testing the same meridian, the reversal of color fields, dyschromatopsia or color amblyopia. Of these Peter[1] gives three especially characteristic types of changes: (1) concentric contraction of fields, with or without central amblyopia; (2) tubular fields; (3) reversal of color fields.

1. In concentric contraction there is a uniform narrowing of the field of vision with the color fields reducing proportionately. The field usually retains its circular shape and contraction may continue down to central vision. Large entering angles, central or annular scotomas are rarely found.

2. The tubular field occurs only in hysteria and malingering and is elicited by taking the fields on the tangent screen or campimeter, when, moving the patient back and forth will not alter the size of the field, which normally grows larger as the patient recedes from the screen.

3. Reversal of the color fields may take any form. The red field which normally is larger than the green, may be found within the green field. On the other hand, the red field may be greatly enlarged to enclose the blue field which ordinarily is the largest color field. This may be due either to a

hypersensitivity to red or a hyposensitivity to blue. Instead of reversal, there may be interlacing of the color fields.

The form and color changes in the visual fields may be comparable with hysterical anesthesia of the skin. Peter[1] draws this analogy because not only is hysterical amblyopia and amaurosis bilateral but may be unilateral in hemianesthesia of the body. Local areas of skin anesthesia may be represented in the retina in the form of scotomata. Muscular palsy, so frequently observed as hemiplegia, monoplegia, etc., occurs in the eye in external or internal, complete or partial, ophthalmoplegia. Paralysis of the sphincter muscles of the bladder, or tonic spasm of the sphincters, also find their analogues in the eye in ptosis, tonic blepharospasm, etc. Painful points, or hyperesthesia, of the skin, are similarly represented in the eye in photophobia, lacrimation, etc.

PATHOLOGY

Pathology is that branch of medicine which treats of the essential nature of disease.[1] There is no pathology in hysteria is an oft-repeated assertion that needs revision in the light of modern psychology and psychiatry, especially since the recent release of atomic energy. Einstein was the first to prove mathematically that energy and matter were synonymous. Therefore, while macroscopically and microscopically no pathological tissue changes are inherent in hysteria, nevertheless the thing that we call life is an integral part of the human economy and lies at the basis of all our mental, kinetic, vegetative and metabolic activities. Sudden death in an otherwise apparently healthy individual does not alter the essential living condition of every cell in the body until the secondary mortal changes set in. However, something very real has departed from the human body.

This entity we call life without which the body ceases to operate as an individual unit which we call man and remains nothing but a lump of clay. It is quite obvious therefore in the light of our new found atomic knowledge that there is a perfect analogy between the concept of the identity of matter and energy with that of the identity of the human body with life, since the human body is matter and life is energy.

This brings us to the point that the human mind whose mainspring is life is one and the same thing as the human body and cannot be separated from it. Succinctly it has been said that if a patient says that he is ill, he is ill, for no man, healthy in mind and body, would make such a statement. Therefore the hysteric is an ill person. There may be no evident pathology of the individual cells but there is definite pathology of the mind, and in many instances this may lead to more dire circumstances than manifest disease of the tissues. Von Graefe stated that hysterical amblyopia is due to an interruption of the connection of the optic nerve fibers with the outer retinal layers, while Peter[2] emphasizes the fact that no part of the visual pathway enjoys immunity in hysteria, and that any variation of the field observed in organic disease of the visual tract may be found in hysteric disease. Therefore, in the hysterical manifestations of amblyopia, amaurosis, central, peripheral, nasal step or annular scotoma, hemianopia, color field changes, etc., a careful examination must be made to exclude such pathological entities as syphilis, tuberculosis, malignancy, multiple sclerosis, tabes, diabetes, meningitis, nephritis, arteriosclerosis, etc. Hysteria cannot be brushed off as the non-existence of disease, but must be treated as a real mental disorder of psycho-pathologic origin.

THERAPY

"The successful treatment of hysteria demands qualities possessed by few physicians. The first element is a due appreciation of the nature of the disease on the part of the physician and friends. It is pitiable to think of the misery which has been inflicted on these unhappy victims by harsh and unjust treatment—very much depends upon the tact, patience, and, above all, the personality of the physician; the man counts more than the method."[3]

Freud's method of psychoanalysis or mental catharsis, in which the old method of the confessional is used, is helpful in eliciting from the patient the cause which in most cases is unknown or at least not realized by him. Once determined, the cause can be removed by many methods. Suggestion is valuable. This may be aided by narcosis or deep ether anesthesia in which the patient is made to believe that the cause has been discovered and an operation has been performed to relieve the trouble. A strong imperative command may have the same effect. Hypnosis sometimes effects a miraculous cure. Since a hysteric in effect does see but shuts

off all consciousness of the things seen by the action of the subconscious mind apparently disconnecting the flow of visual impulses from the cortical areas of consciousness, it is sometimes possible to release these broken connections by the power of hypnosis.[4]

A hysteric should be handled sympathetically and never told that he can see but his visual defect freely admitted and a resolute effort made to overcome it, which may take days, weeks or years. Punishment in any form is to be avoided as useless and even tending to confirm the ailment. In so far as possible the mental causes of suffering, such as marital troubles, unhappy love affairs, distasteful employment or surroundings, etc., should be removed.

Hydrotherapy is sometimes helpful as is the occasional use of drugs. Tonics, as strychnine, arsenic, quinine, are useful, but sedatives like the bromides, barbiturates, etc., are to be avoided in so far as possible. Electricity in its various forms, including electric shock treatment, aids and sometimes effects a cure. Cures of blindness by Christian Scientists, faithhealers, visits to religious shrines, the laying on of hands, or the anointing with oil by self-professed miracle workers, can be explained by their dupes being affected with hysterical amaurosis.

CASE REPORT

Mrs. F. Y., age 25 white, came to hospital January 15, 1947, complaining of blindness in the left eye. She said she woke up that morning and her left eye was blind. Upon examination she had vision R. E.—20/20. L. E.—O., with no light reflex. Fundi normal. Patient was thin and undernourished, weighing only 95 lbs. A mild collyrium was prescribed and she was given a guarded prognosis. Vision gradually returned showing 20/100 in one week; 20/80 in 2 weeks; 20/50 in 3 weeks; and 20/20 in 1 month. Later the following history was elicited. Her husband is a miner and got his leg injured in a mine accident November 1, 1946. He stayed in the hospital until the day before Christmas when he went home. Patient lost her appetite, lost flesh and became quite weak. A week later she tried to get up out of bed in the morning and collapsed on the floor, having complete paralysis of both limbs from the hips down. She was taken to the hospital where she regained the use of her limbs and was discharged after 3 days although she remained very weak. On January 15 she became blind in her left eye.

COMMENT

In the first place her subconscious mind resorted to the vicarious sacrifice of her own limbs for that of her husband, but realizing the uselessness of this, she resorted to the second expedient of shutting out the sight of her husband's injury by the blindness of her left eye. Reasoning from analogy, she probably retained the vision of the right eye as a concession to the unreason of blindness at all. Her refusal to see would no more affect this case than her vicarious offering of her own limbs had cured her husband's injured limb, from which he is still suffering 8 months at this writing from the time of injury. This case is as clearcut as that of Yvette[5] who became as blind as the blind heroine of the "Symphonie Pastorale"; however, not of Beethoven but the French film based on the romance of M. André Gide. Like Yvette, this patient was une fille émotive et impressionable et a une naïveté rafraîchissante qui semble donner raison à la théorie qui admet que 1' hystérique reste enfant tout simplement (an emotional and impressionable girl and has a refreshing innocence which seems to give reason to the theory which admits that the hysteric always remains an infant).

SUMMARY

A woman whose husband had received a severe injury of his leg became completely paralyzed in both limbs. Recovering from this she became blind in her left eye with complete recovery. Diagnosis, hysteria.

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XUM

THE CANCER COMMITTEE MEDICAL SOCIETY OF VIRGINIA

A Case Report

A forty-eight year old white woman was recently referred to a gynecology clinic with the following story:

About twelve months before, occasional scant post-coital vaginal bleeding was noted. About six months later, spotty bleeding independent of coitus began. Three months later, she consulted a physician who started her on estrogen therapy. When three months of this treatment produced no improvement, the physician referred her to the hospital.

On pelvic examination, the anterior lip of the cervix was found to be firm, nodular, and deeply eroded. There was slight thickening of the paracervical tissues. Biopsy from the border of the cervical erosion was reported "epidermoid carcinoma, grade I to II."

The patient has since received deep X-ray therapy followed by insertion of radium. It is still too early to evaluate the immediate result.

COMMENT: 1. The patient's disease remained undiagnosed and untreated for twelve months after appearance of a symptom which called for immediate complete investigation—vaginal bleeding (See *Bulletin*—Cancer of the Uterus, September 1, 1945). Nine months of the delay was the fault of the patient, three months must be blamed on her physician.

2. It is difficult to reconcile the tragic neglect of obvious cancer symptomatology by victim and physician with the often heard statement that attempts to inform laymen about cancer and to rouse physicians to "cancer consciousness" are overdone.

3. It is utterly inadequate medicine to treat abnormal vaginal bleeding on a presumptive diagnosis. The cause must be found and a diagnosis established before any thought is given to treatment.

4. The first step is a complete pelvic examination, including careful inspection of the cervix and biopsy of any suspicious areas. With the tissue diagnostic service now available to every physician in the State (even the containers for mailing specimens are supplied)*, there is no excuse for omission of biopsy. This simple procedure established the diagnosis immediately in the above case, and should have been carried out on the patient's first visit to her doctor.

5. Apparently estrogens were administered on the assumption that the patient's bleeding was a symptom of the climacteric. Aside from the fact that treatment was carried out on the basis of a presumptive diagnosis, it is doubtful that hormone therapy should ever be undertaken without gynecological consultation and guidance. Such therapy should certainly never be started before the patient has been completely investigated and the rationale for hormones thoroughly established.

A DIAGNOSIS OF CANCER WILL NOT BE MADE IN TIME FOR CURATIVE TREATMENT BY A PHYSICIAN WHO IS NOT CANCER CONSCIOUS

*Information about this service may be obtained from Dr. Mason Romaine, Director, Bureau of Cancer Control, State Health Department, Richmond, Va.

Gout May Be Allergic Condition.

Gout, a joint disease that often involves the big toe, may be an allergic condition, according to Joseph Harkavy, M.D., of the medical services of the Mount Sinai Hospital, New York.

Writing in the January 8th issue of *The Journal of the American Medical Association,* Dr. Harkavy says that in a study of three patients "it was possible to show that allergy to specific foods and pollens, as well as to infection, played a conspicuous role in the development of gouty symptoms." Acute attacks of gout could be induced in these patients, he found, by injecting pollen extracts beneath their skin or by feeding them certain foods.

Crippling arthritis of advanced gout may be the result of repeated allergic reactions in some patients, he believes.

PUBLIC HEALTH

L. J. ROPER, M.D.,
State Health Commissioner of Virginia

The report of the Bureau of Communicable Diseases of the State Department of Health for January 1949 as compared with the same month in 1948, is as follows:

	January 1949	January 1948
Typhoid and paratyphoid	2	10
Diarrhea and dysentery	345	244
Measles	2,363	755
Scarlet fever	63	147
Diphtheria	13	37
Poliomyelitis	5	1
Meningitis	9	9
Undulant fever	4	7
Rocky Mountain spotted fever	0	0
Tularemia	3	17

RABIES

Rabies is an acute infection of the central nervous system caused by a virus propagated in dogs and related wild animals such as the wolf, the fox, and the coyote. Man and all warm blooded animals are susceptible.

Rabies has been recognized in Europe and Asia since ancient times. Indeed, the period of summer reckoned by the rise of the Dog Star, Sirius, was a time when it was supposed that madness in dogs was most prevalent. In the boyhood of many of us this legend of antiquity persisted in the warning to beware of swimming during this period of "dog days".

The condition was described by Democritus (500 B.C.) and Aristotle (322 B.C.) while as early as 200 A.D., Galen advised surgical resection of the dog bite wound. Before the eighteenth century rabies was primarily a disease of wild animals. The first recorded epizootic of rabies among domestic dogs occurred in Italy in 1708. By 1728 it had appeared in the major cities of Hungary, Germany and France. There is no record of the disease in North or South American before their colonization by Europeans. State archives contain references to rabies in Virginia in 1753, in North Carolina in 1762, and it was prevalent among dogs in New England in 1785.

The following table shows the prevalence of rabies in animals and man during the past decade in the United States and Virginia:

	Dogs		Man	
Year	U.S.	Va.	U.S.	Va.
1938	8,452	55	47	3
1939	7,386	66	30	0
1940	6,194	97	28	0
1941	6,648	54	30	1
1942	6,332	89	28	0
1943	8,515	277	41	1
1944	9,067	334	53	1
1945	8,505	113	35	2
1946	8,384	108	22	1
1947	6,949	162	26	2
1948		158		0

There is no proved incidence of a human being having recovered from rabies. A case report in humans is therefore a mortality report. From 1908 to 1938 the annual human mortality in the United States varied from 33 to 103, with the highest incidence in 1928. There have been 11 deaths from rabies in Virginia since 1937.

Control measures recommended by the Conference on Rabies* called in Philadelphia in April 1947, are:

1. Adequate laboratory facilities for making examination of brain specimens from susceptible animals for Negri bodies.
   In Virginia such facilities exist in:
   (a) Virginia State Health Department Laboratory
   (b) Branch laboratories in Abingdon, Arlington and Luray
   (c) Richmond City Health Department Laboratory
2. Adequate control of animals through:
   (a) Licensing
   (b) Disposal of stray dogs
   (c) Control of dogs
3. Mass immunization of dogs
4. An educational program to inform the public at large, and dog owners in particular, of the essential facts regarding rabies and the principles concerned in its control.

*Composed of representatives of American Veterinary Medical Association, American Medical Association, United States Public Health Service, Bureau of Animal Industry of the U. S. Department of Agriculture, U. S. Livestock Sanitary Association, American Animal Hospital Association.

MISCELLANEOUS

American Medical Association Assessment For Educational Campaign.

As of February 17th, there were 487 Virginia doctors who have contributed to the special assessment by the American Medical Association. Prince Edward County in the Fourth District announces that they have contributed one hundred per cent and some other societies are not far behind. However, there are a good many societies that have not been heard from as yet. How about it? Let's hear from everyone so the Medical Society of Virginia can have as good a showing as any state—we would like to head the list!

Lists of contributors will be published in the Monthly, and the following is the first list in this series:

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Pernicious Anemia.

Folic acid does not replace liver extract in treating pernicious anemia, point out Russell L. Haden, M.D., and Donald W. Bortz, M. D., of the Cleveland Clinic and Frank E. Bunts Educational Institute, Cleveland, in the November 20 issue of *The Journal of the American Medical Association.*

Folic acid, a vitamin contained in liver, is part of the vitamin B complex.

Pernicious anemia is a disease resulting from deficiencies which seem to be completely relieved by liver extract. The primary defect is a deficiency in a secretion of the mucous lining of the stomach, the factor which acts on food to form the substance or substances necessary for normal nutrition of bone marrow, the nervous system, the tongue, and the gastrointestinal tract. The serious, crippling lesion of the disease is involvement of the nervous system. Treatment must be permanent, as there is no evidence that the missing factor in the stomach ever returns.

Until the introduction of liver therapy, pernicious anemia was always fatal. Over 10,000 persons died yearly in the United States alone.

Lesions of the nervous system in pernicious anemia can be prevented and often helped by liver therapy, but not by folic acid, the physicians say. They doubt that the response of the bone marrow and gastrointestinal tract to folic acid is as satisfactory or as constant as it is to liver extract.

For other types of anemia characterized by an increase in the average size of the red cells of the blood, folic acid may be a better treatment than is liver extract, they believe.

WOMAN'S AUXILIARY TO THE MEDICAL SOCIETY OF VIRGINIA

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Historian—MRS. M. H. HARRIS, West Point

The National Meeting.

Haddon Hall will be the headquarters for the annual meeting of the Woman's Auxiliary to the American Medical Association, which will be held in Atlantic City, New Jersey, June 6th to 10th, 1949.

Requests for reservations should be sent at once to Dr. Robert A. Bradley, Chairman, Subcommittee on Hotels, 16 Central Pier, Atlantic City, New Jersey.

Activities of Arlington Auxiliary.

At the October luncheon meeting of the Auxiliary, the president Mrs. J. R. McGriff presented Mr. John Henderson, administrator of the Arlington County Hospital with a check for $150.00, proceeds of a Bake Sale the Auxiliary had held the preceding month.

In November, the Auxiliary entertained its husbands at a dinner dance at the Washington Golf and Country Club.

The January meeting was well attended by members and guests. A very interesting talk, "Training Deaf Citizens", was given by the guest speaker, Dr. Leonard Elstad, president of Columbia School for the Deaf, Washington, D. C.

Four of the Auxiliary's members, Mrs. J. R. McGriff, Mrs. Robert Detwiler, Mrs. M. W. Glover, and Mrs. A. L. Orlosky, attended the Public Relations Conference in Richmond in January.

The February meeting was a joint meeting with the Arlington County Medical Society. Dr. Marjorie Shearon spoke on "The National Public Health Bill".

EILEEN B. GILLIGAN
(MRS. JOHN H.)
Publicity Chairman

Northampton-Accomac Auxiliary.

Nineteen members and one guest attended the meeting of the Auxiliary on January 25 at the home of Mrs. Charles T. Garcia at Dalbys. Following lunch, the president, Mrs. W. J. Sturgis, Sr., stated that the Auxiliary was beginning its thirteenth year with the slogan "Cooperation and Progress are Our Watchwords". It was announced that Dr. H. L. Denoon, Jr., and Dr. J. L. DeCormis would serve on their advisory council this year.

Mrs. DeCormis gave a report from the State meeting in Richmond, after which Mrs. Sturgis presented the speaker of the afternoon, Mr. James E. Douglas, treasurer of the Northampton-Accomac Hospital, whose topic was "Our Hospital: Its Work and Its Needs". He interestingly stated the details of operation of the hospital and told of its tangible and intangible needs.

CATHERINE R. TROWER, *Chairman*,
(MRS. HOLLAND)
Press and Publicity

BOOK ANNOUNCEMENTS

Doctors of Infamy. The Story of the Nazi Medical Crimes. By ALEXANDER MITSCHERLICH, M.D., Head of the German Medical Commission to Military Tribunal No. 1, Nuremberg; and FRED MIELKE. Translated by Heinz Norden. With Statements by Three American Authorities Identified with the Nuremberg Medical Trial; Andrew C. Ivy, M.D., Vice-President, University of Illinois, Medical Scientific Consultant to the Prosecution, Military Tribunal No. 1; Telford Taylor, Brigadier General, U. S. Army, Chief of Counsel for War Crimes; and Leo Alexander, M.D., Psychiatrist, Consultant to the Secretary of War and to the Chief of Counsel for War Crimes. Henry Schuman, New York. 1949. xxxix-172 pages. Illustrated with 16 pages of photographs. Cloth. Price $3.00.

Clinical Case-Taking. Guides for the Study of Patients. History-Taking and Physical Examination or Semiology of Disease in the Various Systems. By GEORGE R. HERRMANN, M.D., Ph.D., Professor of Medicine, University of Texas. Fourth Edition. St. Louis, The C. V. Mosby Company. 1949. 240 pages. Cloth. Price $3.50.

Social Medicine. Its Derivatives and Objectives. The New York Academy of Medicine Institute on Social Medicine, 1947. Edited by Iago Galdston, M.D. The Commonwealth Fund, New York. 1949. xvi-294 pages. Cloth. Price $2.75.

Essentials of Gynecologic Endocrinology. (With Sections on the Male). By GARDNER M. RILEY, Ph.D., Assistant Professor of Obstetrics and Gynecology, University of Michigan Medical School. Caduceus Press, Ann Arbor, Michigan. 1949. x-205 pages. Illustrated. Price $3.00.

Handbook of Orthopaedic Surgery. By ALFRED RIVES SHANDS, JR., B.A., M.D., Medical Director of the Alfred I. DuPont Institute of the Nemours Foundation, Wilmington, Delaware; etc. In Collaboration with RICHARD BEVERLY RANEY, B.A., M.D., Associate in Orthopaedic Surgery, Duke

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University School of Medicine, Durham, North Carolina; etc. Illustrated by Jack Bonacker Wilson. Third Edition. St. Louis, The C. V. Mosby Company. 1948. xviii-574 pages. Cloth. Price $6.00.

This well rounded Handbook of Orthopedic Surgery first appeared in 1937 and in this short period of time has become the standby for the student and the general practitioner. The third edition is a further step to keep pace with the rapid advancement of orthopedic surgery in this modern age. Few things have been omitted, among them, the specific dosage of antibiotic therapy, and the recent advances in the use of homographs, made more available by the new bone banks.

The 76 page bibliography will be most helpful to workers in this field.

J. J. DOBBIE

Pathology. Edited by W. A. D. ANDERSON, M.A., M.D., F.A.C.P., Professor of Pathology and Bacteriology, Marquette University School of Medicine, Milwaukee, Wisconsin. St. Louis, The C. V. Mosby Company, 1948. xii-1453 pages. With 1183 Illustrations and 10 Color Plates. Cloth. Price $15.00.

Those who read this new book will have an opportunity to become acquainted not only with Dr. W. A. D. Anderson, author of the popular "Synopsis of Pathology" which is already in its second edition, but also with thirty-one other writers whose names frequently appear in current medical literature. In this volume Dr. Anderson, as editor, has brought together the specialized knowledge of this outstanding group of contributors concerning the various fields or aspects of pathology. The order of presentation of the material is a familiar one; that is, the earlier chapters are devoted to discussions of the fundamental disease processes in general and the later ones to diseases as they pertain to various organs and systems of the body. Dr. Anderson maintains this form of presentation "because it has been found logical and effective in teaching medical students and because it facilitates study and reference by graduates." However, the position of the chapter on "Heredity and Constitution in Disease", being the last one in the book, appears to be contrary to the intended form. For, because of the general nature of the discussion dealing with such things as modes of inheritance, mutations, susceptibility to infectious diseases and the relation of heredity to neoplasms, it probably would be placed more suitably among the earlier chapters.

The subject matter is comprehensively dealt with by each of the writers, and it is done with such remarkable completeness that the book will be useful not only to medical students but to practicing and graduate physicians as well. One will find timely discussions of certain conditions which were observed and studied with considerable interest during and after the recent war; e.g., the crush syndrome, shock, atom bomb injuries together with the nature and effects of radiation in general, and infectious hepatitis. In keeping with the need of the times, increased attention is given to certain viral, protozoal, parasitic and other conditions which are usually regarded as "tropical diseases". Also more than usual consideration is given to diseases of the skin, of organs of special senses, of the nervous system, and of the skeletal system. Most of the chapters dealing with diseases of organs or systems begin with a brief account of normal structure and function, knowledge of which, obviously, is essential for a proper understanding of pathology.

Because of the many contributors one may expect to find some repetition of certain subjects, but, doubtless, this is permitted for completeness of the individual chapters. Nevertheless, wherever there is such a discussion, a convenient reference is made to the page or chapter to which the reader may quickly turn for a more detailed description. One feature which may be annoying to the reader is the frequent use of small type throughout. Apparently this is done to limit the size of the book, for otherwise the number of pages would be greatly increased. Attractive features of this work are the large number of illustrations (1183 figures and 10 color plates) which, except for a few, are very good and the many, up-to-date, well-chosen references at the end of each chapter which should stimulate one to pursue further the problems of pathology.

In this authoritative textbook a successful attempt has been made "to present disease in as whole or as true an aspect as can be done with present knowledge", so that the hope expressed by the editor in his preface "that this book will be both a foundation and a useful tool for those who deal with the problems of disease" should indeed be realized. The book is recommended to medical students, to practicing physicians and to those receiving basic training in pathology; and it is highly deserving of a place in the pathologist's library.

THOMAS M. SCOTTI

EDITORIAL

Dr. Hugh S. Cumming (1869-1948)

ONE of the most distinguished careers in the history of public health came to an end December 20 with the death of Doctor Hugh Smith Cumming at his home in Washington, D. C.

Dr. Cumming, Surgeon General of the United States Public Health Service from 1920 to 1936 and for many years a world figure in his profession, had suffered a thrombosis on November 19, 1947, from which he only partially recovered.

It was during Dr. Cumming's administration of the Public Health Service and the important Pan American Sanitary Bureau, of which he had been Director for 27 years, that public health came to be recognized in the United States as a major responsibility of government in international as well as domestic affairs. Dr. Cumming, in his more than a half-century of service, became one of the dominant figures in this development.

Born in Hampton, Virginia, August 17, 1869, he acquired his early education in the Symmes-Eaton Academy, oldest public school in America, and in private schools before studying for a year at City College of Baltimore. Upon returning from Baltimore, he continued his studies in languages and sciences under private tutoring and for a year taught school in Harford County, Maryland.

In 1891 he entered the Medical Department of the University of Virginia from which he was graduated in 1893 with the degree of Doctor of Medicine. He was a member of Chi Phi Fraternity, Eli Banana Society and of the Raven Society. He was president of the Jefferson Literary Society and was one of the founders of the Pi Mu medical fraternity. He was elected most popular man in the university and historian of his class.

Following his graduation, Dr. Cumming went to Richmond as house doctor in Dr. Hunter McGuire's old St. Luke's Hospital, at the same time assisting Dr. McGuire in surgery in the University College of Medicine from which he graduated in 1894.

On February 10, 1894, young Dr. Cumming wrote a letter from St. Luke's which broke the ground for his long and distinguished career. It was a letter to Surgeon General Walter Wyman requesting information concerning examinations for entrance into the United States Marine Hospital Service. He took the examination and was one of four who were successful among 27 applicants.

Twenty-six years later, during which time the United States Marine Hospital Service had become, on July 1, 1902, the United States Public Health and Marine Hospital Service, and on August 14, 1912, the United States Public Health Service, Dr. Cumming was appointed as Surgeon General of the Public Health Service. On March 10, 1920, he took the oath for the first of his four successive terms in that high office. From the time he first entered the Service in 1894 Dr. Cumming served under nine presidents, under five of them as Surgeon General. During his twenty-six years of service, culminating in his appointment as Surgeon General, Dr. Cumming proved his abilities not only in the realm of science but in administration and diplomacy.

He served successively at the U. S. Marine Hospital, Staten Island, New York, Ellis Island, and Montauk Point, New York, in Mississippi and Louisiana, at Philadelphia and Cape Fear. These assignments included medical inspection of aliens, quarantine inspection of returning troops, and participation in Service work during a yellow fever epidemic.

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In June 1899, Dr. Cumming was placed in charge of the South Atlantic Quarantine at Blackbeard Island, off the coast of Georgia, the United States refuge station for infective vessels from foreign ports. Here he treated yellow fever cases, and here he saw his first case of bubonic plague.

Following his recovery from an operation for appendicitis, Dr. Cumming was ordered, on December 2, 1901, to San Francisco, California, as Chief Quarantine Officer. It was during this tour of duty that Dr. Cumming's abilities as an administrator and diplomat first came into important play. Bubonic plague was known to be rampant in the area, but a disagreement had sprung up among Federal, State, and local authorities as to the seriousness of the outbreak and jurisdictional handling of the problem. Dr. Cumming was of assistance in harmonizing the differences and was able to aid in instituting constructive action. So successful was his administration as Chief Quarantine Officer of San Francisco that at the end of his four-year detail commercial and health interests joined in requesting his reassignment.

Following his San Francisco detail, Dr. Cumming served for four years in Japan, where he was sent in March, 1906, to the Office of the United States Consulate General in Yokohama to guard against exportation of plague and cholera to the United States. In Japan he had an opportunity to follow the research work of Kitisato and other great Japanese scientists and to further his knowledge of both the administrative and scientific handling of tropical diseases.

From Japan, he was ordered back to the United States and placed in charge of the Cape Charles Quarantine Station at Fortress Monroe, Virginia, to coordinate the confused quarantine situation in Hampton Roads.

In the Autumn of 1912, Dr. Cumming requested leave of absence to pursue his studies of tropical diseases in London, but was prevented from leaving by reports that pollution of tidal waters in the Chesapeake Bay was threatening wholesale destruction of the great oyster beds in that area. Dr. Cumming was assigned to this work, and his service gained him recognition not only in this country but abroad. His assignment later was extended to cover the entire Atlantic Coast.

With the advent of World War I, Dr. Cumming was detailed to the Office of the Surgeon General of the Navy, where he remained until the fall of 1918, when he was ordered by the President to report on sanitary conditions at camps in France and elsewhere, and at the ports of embarkation of returning United States troops.

As travel restrictions were relaxed following the war, intensifying the danger of infection from abroad, Dr. Cumming was given a general assignment by the President to conduct sanitation studies at European ports. This and similar assignments in this country and overseas not only made Dr. Cumming an outstanding authority on quarantine matters, knowledge that stood him in good stead in his work of completing the U. S. quarantine system during his tenure as Surgeon General, but gave him an unusual awareness of the importance of international cooperation in the field of health. During this period he took part in the conference at Cannes which resulted in the organization of the League of Red Cross Societies, and he held frequent conferences with leading health authorities of other countries on the subject of an international health organization.

In 1920, the same year he first took office as Surgeon General of the Public Health Service, Dr. Cumming was elected Director of the Pan American Sanitary Bureau, created by treaty in 1902 as the world's first international health organization. He held this office, concurrently with his other duties, until his retirement and election as Director Emeritus on February 1, 1947. He represented the United States Government at every Pan American Sanitary Conference from 1920 until his retirement

and saw the Bureau grow, in large part through his efforts, from little more than a reporting service to a full-fledged health organization, with professional, technical, and administrative representatives throughout Latin America.

In addition to his work with the Pan American Sanitary Bureau, Dr. Cumming found outlet for his interest in international health problems in the Office International d'Hygiene publique and in the Health Section of the League of Nations. He had played important parts in both bodies for nearly a quarter of a century prior to their dissolution in 1946 to make way for the new World Health Organization of the United Nations. In his capacity as Director of the Pan American Sanitary Bureau he attended both the Paris and New York conferences which led to the establishment of the new organization. For his work in international health, Dr. Cumming was decorated by many foreign countries and held honorary membership in a number of the world's leading medical bodies.

It was against the broad concept of health as an international, as well as a national, responsibility that many of the programs of Dr. Cumming's administration as Surgeon General of the United States Public Health Service were conceived, developed, and carried through.

It was during Dr. Cumming's administration that the national quarantine system was completed with Federal acquisition of the last state-owned quarantine station at the port of New York. Other achievements of the period included:

Reorganization of the Hospital Division of the Service and expansion of facilities, following World War I, to meet the needs of ex-service men and women; establishment of a national leprosarium; control of several outbreaks of bubonic plague in United States port areas; inauguration of the plan of assigning medical officers to American consulates abroad for examination of prospective emigrants to the United States; development and expansion of important research and field investigation activities of the Service, and the inauguration of studies of silicosis and other dust diseases which greatly extended knowledge in this field.

Dr. Cumming was also the key figure in a number of programs carried out with Congressional authorization during this period, including: Construction of a new building for the Public Health Service headquarters in Washington, now occupied by the Atomic Energy Commission; construction of eleven new Marine Hospitals in the United States; construction of two hospitals for treatment of narcotic addicts; establishment of the Division of Mental Hygiene in the Public Health Service; construction of new quarantine stations at principal ports of the United States; enlargement of the Corps of Commissioned Officers of the Public Health Service to include dental, engineering, and pharmacy personnel as well as medical officers.

Dr. Cumming inaugurated a study of malignant growths by medical officers of the Service at Harvard University and at the Hygienic Laboratory, forerunner of the National Institutes of Health, which have developed into a major function of the Service.

An alumnus of the first class of the old Hygienic Laboratory, which had carried on its work in the attic of the old Service Headquarters, Dr. Cumming, as Surgeon General, made it his business to obtain appropriations for an expansion of this activity.

His efforts in this direction culminated shortly before his retirement in a gift of land at Bethesda, Maryland, and the passage of appropriations with which were constructed the present National Institutes of Health.

Following the discovery of vaccines for Rocky Mountain Spotted Fever, by an officer of the Public Health Service, Dr. Cumming arranged for the Service to take over a small laboratory at Hamilton, Montana, and obtained appropriations for its

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enlargement. It was in this laboratory that these vaccines, as well as the present yellow fever vaccine, were manufactured.

Industrial medicine and sanitation was another field in which considerable progress was made during Dr. Cumming's administration. When many leading public health authorities in the country were campaigning against the use of tetra-ethyl lead in gasoline, Dr. Cumming appointed a board to prescribe the conditions under which tetra-ethyl might safely be manufactured and used. As a result, use of the fuel was greatly facilitated, a fact of incalculable significance not only in the industrial and social progress of the country but in its position as a military power as well.

It was during Dr. Cumming's administration also that standards for safe production, processing, and handling of milk were introduced throughout the country. Important strides also were made in the field of stream sanitation.

Dr. Cumming's foreign citations were additional to the many honors accorded him in the United States by educational, professional, and public organizations and institutions. He was an honorary fellow of the American College of Surgeons, the American College of Physicians, and the American College of Dentists; a life member of the American Public Health Association, the American College of Physicians, the Association of Military Surgeons of the United States, the American Hospital Association, and the United States-Mexican Border Public Health Association.

He was a past president of the Association of Military Surgeons of the United States, the Southern Medical Association, the American Public Health Association, and the Gorgas Memorial Institute of Tropical and Preventive Medicine.

He served from 1929 as a member of the Board of Visitors of Saint Elizabeth's Hospital, Washington, D. C., a Presidential appointment, and also was an active member of the Board of Directors of Garfield Memorial Hospital, Washington, D. C. He held honorary degrees from the Medical College of Virginia, the University of Pennsylvania and Yale University. In 1936 he was awarded the Hartley Gold Medal by the National Academy of Science for "Application of Scientific Knowledge to Public Service". Other citations included the Gorgas Medal and Prize of the Association of Military Surgeons of the United States for "distinguished service in the field of national and international public health" and the William Freeman Snow Award "For Distinguished Service to Humanity".

Dr. Cumming was married October 28, 1896, at Carters Grove, Virginia, on the James River, to Lucy Booth, daughter of Dr. Edwin Gilliam Booth. In addition to his wife, he leaves a son, Hugh Smith Cumming, Jr., counselor to the American Embassy at Stockholm, and a daughter, Clara Diana, wife of Manville Kendrick, of Sheridan, Wyoming. Two grandsons also survive, John B. Kendrick, II, and Hugh Smith Cumming Kendrick.

Dr. Cumming was buried at Hampton, Virginia, in the churchyard of St. John's, oldest English parish in America, December 24, 1948.

—U. S. PUBLIC HEALTH SERVICE

Our Scattered Health Activities

AS we went to church this morning we turned on the radio, partly to see if our watch were right (it has a way of running down on Sunday morning) and partly to see if there were any good news on the air. We pressed quickly one button after another, until a familiar voice arrested our attention. It was telling the radio audience that the only hope of the world today and its inhabitants was to do fewer things but to do them well.

We were reminded of our scattered efforts to secure better health for all the people.

The problem is a tremendous one and is worthy of the best efforts and the cooperation of all the purveyors of medical care whether they be government agents, private foundations, or the individual practitioners of curative medicine. But what do we have? Government sowing dissension in the medical ranks.

Great foundations such as the Rockefeller Foundation have shown what can be done with money and organization when we learn how certain diseases can be prevented or cured. Hookworm disease and yellow fever have been eradicated from large areas of the globe. We have the "know-how" in regard to other diseases. Tuberculosis still kills more young adults than any other disease. Gonorrhoea is the second most prevalent disease and syphilis is the third. The United States Government has entered both of these fields. Why not complete these jobs instead of taking over the private practice of medicine? We hear much about the unequal distribution of medical care. What about the unequal distribution of public health activities? Many counties of Virginia, and elsewhere, have no health officers or public health nurses.

We are aware that the private practice of medicine has many shortcomings, the chief of which being its increasing cost and the uneven distribution of doctors, nurses and dentists. In spite of these defects, American medicine is today doing a good job. More Americans get better medical care than any people in the world. With prepaid medical care plans, which are rapidly developing, everyone should be able to have all the medical care he wants without financial hardship.

The American Medical Association

THE American Medical Association is being "smeared" on a nation wide scale by the officers of the Social Security Agency in their propaganda for compulsory health insurance. Under the circumstances it might be well to keep in mind the aims, objects and organization of the A. M. A. The American Medical Association was organized in 1847 for the prime purpose of improving medical education. The study of epidemics was also a part of its early activity. It was largely responsible for the formation of Boards of Health in the various states. For years it fought single handed for good medical education. Among other achievements has been the bringing about of truthful medical advertising and the establishment of standards for hospitals, drugs, food and the appliances used in the treatment of the sick. Besides a number of scientific journals, it publishes at less than cost, the complete index of the medical literature in the world. The prime motive back of all these activities has always been the welfare of the patient. It might well say in the words of a publication of the Rotary International "Service is My Business".

The business of the Association is conducted by the House of Delegates, composed of a representative for each 1,000 members of the state societies, and one representative from each scientific section of the Association. In addition, there is one delegate each from the Army, Navy and Public Health Service. The Board of Trustees acts as an Executive Committee in the interim between the meetings of the House of Delegates. Thus the American Medical Association represents the great majority of doctors of medicine in the United States. It has authority to speak for the medical profession but it has no authority over the individual doctor. If a doctor violates the code of ethics, a document written by Thomas Percival in England in the 18th Century and later re-written by the late William H. (Popsy) Welch in the 20th Century, he may be tried by his local society. Should his local society drop him from membership, he is automatically dropped by his state society and by the American Medical Association.

The A. M. A. is your organization—if it does not do what you want, it is because

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the doctors back home do not let their representatives in the House of Delegates know what they want.

Nebraska Legislature Petitions Congress

THE following is from page A 212, Congressional Record-Appendix, January 17, 1949.

"Resolution memorializing the Congress of the United States with respect to a national compulsory sickness insurance program:

"Whereas the American people now enjoy the highest level of health, the best standards of scientific medical care and the finest medical institutions ever attained by any major country in the world; and

"Whereas these accomplishments of American medicine are the results of a free people working under a system of free enterprise; and

"Whereas the experience of all countries where government has assumed control of medical care has been a progressive deterioration of medical standards and medical care, to the detriment of the health of the people: now, therefore, be it

"Resolved by the members of the Nebraska Legislature in sixty-first session assembled:

"1. That the Legislature of the State of Nebraska respectfully request the Congress of the United States to refrain from imposing upon the citizens of this nation any form of compulsory insurance, or any system of medical care designed for national bureaucratic control.

"2. That Nebraska Senators and Representatives now in the Congress of the United States be and are hereby respectfully requested to use every effort at their command to prevent the enactment of such legislation.

"3. That copies of this resolution be transmitted by the Clerk of the Legislature to the President of the United States, the presiding officers of the United States Senate and United States House of Representatives and to each Senator and Congressman from Nebraska."

That Nebraska should be the first State to send resolutions to Washington against compulsory health insurance is not just a coincidence. Nebraska is one of four states to have a public debt of less than one dollar per capita. The people of Nebraska have always counted the probable cost of their proposed legislation. For that reason one would expect that this state be out in front in the opposition to bureaucratic medicine.

Note. Since the above was written the Arkansas Legislature has passed a similar resolution without a dissenting vote.

SOCIETIES

The Mid-Tidewater Medical Society

Held its first quarterly meeting for 1949 on January 25th, at the West Point Country Club. The usual business session was omitted to give more time for the speakers of the evening.

Dr. M. P. Rucker, Richmond, president of the Medical Society of Virginia, made a few introductory remarks outlining the problems confronting the American medical profession, which problems were to be discussed by the other speakers on the program.

Dr. Guy W. Horsley, Richmond, explained the assessment that had been made by the American Medical Association and the reasons that it was necessary for each physician to do his part.

Dr. J. L. Hamner of Mannboro spoke on the American Academy of General Practice. He gave a brief history of the Academy and especially of the Virginia section of the Academy.

The main address of the evening was made by Dr. Walter B. Martin of Norfolk, who explained clearly and forcibly why it was necessary for the medical profession to take immediate and adequate steps to prevent proposed legislation from being enacted, that is now being made ready for congressional consideration.

At the conclusion of the discussion of the papers presented by the above speakers, Dr. M. H. Harris, President of West Point moved that the secretary of the Mid-Tidewater Medical Society be instructed to write to each of the members of the Society requesting them to make their payment of the assessment to the secretary-treasurer of the society. The motion was carried unanimously.

Dr. William H. Hosfield, West Point, is secretary-treasurer.

The Tazewell County Medical Society

Met February 3, at the River Jack Restaurant for dinner. The meeting was presided over by Dr. G. D. Vermilya of Richlands, who assumed office at this meeting. Three new members were elected to the society. They are:

Drs. Lewis H. Armentrout and Harry L. Day of Richlands, and P. P. Ferraraccio of Bluefield.

During the business meeting the $25.00 assessment proposed by the A.M.A. was discussed and it was the desire of the members present that the Society go on record as endorsing this plan and all agreed to support it by paying the assessment promptly.

Dr. Lewis H. Armentrout read a paper on "The Recognition and Treatment of the More Common Ear Disease" which involved a great deal of comment and discussion and was well received.

MARY ELIZABETH JOHNSON, *Secretary*

The Northampton County Medical Society

Held its regular quarterly meeting at the Eastville Inn on January 13, at which time Dr. Walter B. Martin of Norfolk spoke on "Dangers to the Public of Socialization of Medicine". He also told of his observations of the plan in England, where he had recently visited.

The annual election of officers resulted as follows: President, Dr. J. M. Lynch, Cape Charles; vice-president, Dr. W. Carey Henderson, Nassawadox; and secretary-treasurer, Dr. Charles T. Garcia, Cape Charles.

The Wise County Medical Society

Met at Norton on February 2nd with a dinner beginning at 7:30 P.M. There were twenty-seven members present. Dr. Joseph R. Blalock, Marion, presented a very interesting lecture on Psychosomatic Illness. Color films on Intragastric Therapy and Appendicitis were also enjoyed.

New officers were elected as follows: President, Dr. B. C. Henson, Roda; vice-presidents, Drs. G. T. Foust, Norton, F. E. Handy, Appalachia, and J. D. Culbertson, Coeburn. Dr. T. J. Tudor, Norton, was re-elected secretary-treasurer. Dr. Ernest J. Benko, Norton, was elected to the Board of Censors.

In the drive for funds for the educational campaign of the American Medical Association, twenty-six of this group contributed $25.00 each.

The Shenandoah County Medical Society,

A unit of the Northern Virginia Medical Society, had Dr. George Murphy of Winchester as leader of a clinico-pathologic conference at its January meeting. At the February meeting, Dr. Maurice Young, of Johns Hopkins University, Baltimore, spoke on "Clinical Significance of Systolic Murmur in Childhood".

Dr. George G. Crawford of Strasburg is president and Dr. C. L. Gossels of Mt. Jackson secretary.

The Arlington County Medical Society

And its Woman's Auxiliary held a joint meeting at the Washington Golf and Country Club on the evening of February the 17th, at which time Marjorie Shearon, Ph.D., spoke on "Federal Propaganda for the Welfare State". A social hour followed.

At its regular meeting on January the 20th, the Society passed a resolution approving the action of the American Medical Association regarding socialized medicine and the $25.00 assessment.

Dr. John T. Hazel and Dr. John B. Leary are president and secretary, respectively, of this Society.

Roanoke Academy of Medicine.

Following dinner in the ball room of the Hotel Patrick Henry on February the 7th, there was a short business session, after which Dr. Theodore Woodward, associate professor of medicine at the University of Maryland, by invitation, addressed the Academy on "Clinical Uses of Chloromycetin and Aureomycin".

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The Academy recently appointed the following doctors as its committee on public relations: Dr. Fred E. Hamner, Dr. W. L. Powell and Dr. David S. Garner.

The president and secretary of the Academy are Dr. Charles H. Peterson and Dr. T. J. Humphries.

James River Medical Society.

At the annual meeting of this society, held recently, Dr. E. J. Haden of Ore Bank was elected president, Dr. Russell Snead of Columbia vice-president, and Dr. Garland Dyches of Dillwyn was re-elected secretary-treasurer.

Lee County Medical Society.

At the regular meeting of this Society on January the 26th, the following officers were elected for 1949: President, Dr. G. C. Sumpter, Rose Hill; vice-president, Dr. Chas. C. Carr, Pennington Gap; and secretary-treasurer, Dr. J. H. Dellinger, also of Pennington Gap.

The Orange County Medical Society

Met at Orange on January 26, with the president, Dr. C. Cameron Kress of that place presiding at a dinner meeting. There was an attendance of forty-five, including members, dentists, nurses, and representatives from civic organizations. Talks were given by Dr. V. W. Archer, councilor, Dr. M. P. Rucker, president of the Medical Society of Virginia, and by Henry S. Johnson, director of public relations of the State Society. Dr. J. G. Bruce of Gordonsville is secretary.

Lynchburg Academy of Medicine.

Following a short business session at the January meeting of the Academy, when Dr. Wm. T. Pugh was installed as president, and Dr. S. Miles Bouton, Jr., full-time pathologist at the Lynchburg General Hospital, was elected to membership, Dr. George B. Dowling of Washington, D. C., deputy administrator of the Red Cross National Blood Program, spoke on its program. A number of visitors connected with the local and surrounding Red Cross chapters were present.

NEWS

Seminar On Immunity and Allergy and Stuart McGuire Lectures.

The Department of Continuation Education of the Medical College of Virginia, Richmond, will present a program on allergy and immunology in connection with the Stuart McGuire Lectures on March 17th and 18th. This will be open to all physicians, and the program is as follows:

MARCH 17TH

9:00-10:00 a.m.—WHAT THE DOCTOR SHOULD KNOW ABOUT HAY FEVER—Dr. Will C. Spain, Professor of Clinical Medicine, New York Post-Graduate Medical School; Director, Department of Allergy, New York Post-Graduate Hospital.

10:00-11:00 a.m.—TREATMENT WITH SPECIAL REFERENCE TO INTRACTABLE ASTHMA—Dr. Horace S. Baldwin, Assistant Professor of Clinical Medicine, Cornell Medical School, New York City; Director, Allergy Clinic, New York Hospital.

11:00-12:00 a.m.—ALLERGY IN RELATION TO MEDICINE AS A WHOLE—Dr. Wingate M. Johnson, Professor of Clinical Medicine, The Bowman Gray School of Medicine, Winston-Salem, North Carolina.

2:00- 3:00 p.m.—THE DIFFERENTIAL DIAGNOSIS IN ALLERGIC CONDITIONS—Dr. Horace S. Baldwin.

3:00 -4:00 p.m.—THE TREATMENT OF POISON IVY AND OTHER CONTACT DERMATOSES—Dr. Will C. Spain.

STUART MCGUIRE LECTURE I

8:00 p.m.—THE CHANGING CONCEPT OF ALLERGY. (1) Underlying Mechanisms—Dr. Harry L. Alexander, Professor of Clinical Medicine, Washington University School of Medicine, St. Louis, Missouri.

MARCH 18TH

9:00-10:00 a.m.—THE MANAGEMENT OF THE ASTHMATIC CHILD—Dr. Robert Chobot, Assistant Clinical Professor of Pediatrics, Columbia University, New York City; Chief of Pediatric Allergy Clinic, New York Post-Graduate Hospital.

10:00-11:00 a.m.—URTICARIA AND ANGIONEUROTIC EDEMA—Dr. Walter L. Winkenwerder, Assistant Professor of Medicine, Johns Hopkins University, Baltimore, Maryland.

11:00-12:00 a.m.—THE ROLE OF INFECTION IN ALLERGY—Dr. Oscar Swineford, Jr., Professor of the Practice of Medicine, University of Virginia, Charlottesville, Virginia; Chief, Allergy Clinic, University Hospital.

2:00- 3:00 p.m.—THE VASOMOTOR RHINITIS PATIENT—Dr. Walter L. Winkenwerder.

3:00- 4:00 p.m.—NEW DRUGS IN THE TREATMENT OF ALLERGIC DISEASES—Dr. Robert Chobot.

STUART MCGUIRE LECTURE II

8:00 p.m.—THE CHANGING CONCEPT OF ALLERGY. (2) Clinical Examples—Dr. Harry L. Alexander.

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Dr. Frank L. Apperly,

Professor of Pathology at the Medical College of Virginia, has been named by President of the United States, Harry S. Truman, to serve as a senior surgeon in the United States Public Health Service Reserve. Dr. Apperly's appointment in addition to calling for advisory service may also call him to active duty within the confines of the United States in the event of emergency.

Dr. H. Norton Mason,

Richmond, was recently installed as the new commander-in-chief of the Stonewall Jackson Post 981 of the Sons of Confederate Veterans.

Married.

Dr. John Moyer Meredith and Miss Etta Elizabeth Hazelgrove, both of Richmond, January 28th.

Dr. Herbert Clifton Allen, Jr., Richmond, and Mrs. Elizabeth Hunt Wheeler, Bedford, Pennsylvania, February 1st. He is a graduate of the Medical College of Virginia in 1941. They will make their home in Southern California.

News From School of Medicine, University of Virginia.

On January 21, under the auspices of the Postgraduate Program for House Officers, Dr. Donald Monroe, Harvard University, and Dr. Charles W. Cashman, Rutland Heights Veterans Administration Hospital, Rutland, Massachusetts, presented to the faculty and student body a discussion of the subject, "Social and Work Rehabilitation for Patients Paralyzed as the Result of Spinal Cord Injury".

At the annual meeting of the Southeastern Allergy Association in Durham, North Carolina on January 22 and 23, Dr. Oscar Swineford conducted a panel on "Infectious Asthma". Included in this panel was a discussion of "History and Physical Examinations and Skin Testing in the Diagnosis of Infectious Asthma" by Dr. Swineford, and a discussion of "The Conservative and Surgical Treatment of Sinusitis in Infectious Asthma" by Dr. Fletcher Woodward, Professor of Otolaryngology. At this meeting, Dr. Swineford was elected president of the Southeastern Allergy Association.

On January 25, Dr. H. B. Mulholland spoke to the Board of the Farmville Community Hospital, Farmville, on the subject: "Medical Care in Virginia".

Dr. C. J. Frankel, Associate Professor of Orthopedics, spoke to the Augusta County Medical Society on January 28th on the subject, "Low Backache".

Dr. Vernon W. Lippard, formerly Dean of the School of Medicine of Louisiana State University, assumed his duties as Dean of the University of Virginia Medical School on February 1. Dr. Lippard succeeds Dr. H. E. Jordan who has served as Dean of the Medical School since 1939. Dr. Jordan will remain with the Medical School as Professor of Anatomy until his retirement in June.

At the Fourth Annual National Conference on Rural Health, held in Chicago, Illinois on February 4th, Dr. H. B. Mulholland, Professor of Internal Medicine, gave a lecture entitled "Animal Diseases Affecting Humans".

Academy of General Practice Application Blanks.

Many members of state and county medical societies have written to their journals inquiring as to how they can procure application blanks for membership in the American Academy of General Practice. The national headquarters office is located at 231 West 47th Street, Kansas City 2, Missouri, and Mr. Mac F. Cahal is the executive secretary. This office will be glad to forward application blanks to practitioners living in states with no state chapter. But where a state chapter exists, blanks must be secured from the secretary of the respective constituent state chapter. The secretary of the Virginia chapter is: John O. Boyd, Jr., M.D., 820 South Jefferson, Roanoke.

Southeastern Allergy Association.

At the recent meeting of this Association held in Durham, North Carolina, Dr. Oscar Swineford, University of Virginia, was elected president and Dr. Oscar Hansen-Pruss, Duke University, vice-president.

Dr. C. Howard Cain,

Class of '30, Medical College of Virginia, formerly located in Wakefield, is now clinical internist on the staff of Edgewood Sanatorium, Orangeburg, South Carolina.

International Congress On Rheumatic Diseases.

The American Rheumatism Association will conduct its Seventh International Congress, May 30th

to June 3rd inclusive, in New York, under the auspices of the International League Against Rheumatism. The Congress will be devoted to the subject of rheumatic diseases in all its phases, together with certain allied topics. There will be five morning and two afternoon plenary sessions in the ballroom of the Hotel Waldorf-Astoria, which is headquarters hotel. On three afternoons there will be concurrent programs at five of the large New York hospitals. There will be three or four clinical papers presented followed by discussions; a one hour clinic, showing cases relating to the papers, and a forty-five minute round-table discussion.

Dr. Ralph Pemberton, Philadelphia, is president of the International League Against Rheumatism, and Dr. Richard H. Freyberg, New York, of the American Rheumatism Association.

The Virginia Radiological Society

Will hold an interim scientific session on April 2nd at the University of Virginia Hospital, Charlottesville. The following program will be presented:

9:00 a.m.—UNUSUAL PYELOGRAMS AND FOLLOW-UP INFORMATION BY THE DEPARTMENT OF UROLOGY—Drs. Vest, Warren and Merren.
Discussion and Questions—10 minutes.

9:40 a.m.—DIAGNOSIS OF OBSCURE LESIONS OF THE SPINAL COLUMN, DEPARTMENT OF ORTHOPAEDICS—Drs. Funsten and Frankel.
Discussion and Questions—10 minutes.

10:20 a.m.—SURGICAL RELIEF OF PAIN IN CANCER PATIENTS, DEPARTMENT OF NEUROSURGERY—Drs. Gayle Crutchfield and Martinez.
Discussion and Questions—10 minutes.

11:00 a.m.—THE COURSE AND TREATMENT OF SUPERFICIAL HEMANGIOMAS, DEPARTMENT OF SURGERY—Dr. W. H. Parker.
Discussion and Questions—10 minutes.

11:40 a.m.—THE PLACE OF X-RAY IN ACTIVE UPPER GASTRO-INTESTINAL BLEEDING, DEPARTMENT OF SURGERY—Dr. W. R. Sandusky.
Discussion and Questions—10 minutes.

12:20 a.m.—THE CHANGING CONCEPT IN THE SURGICAL MANAGEMENT OF PULMONARY ABSCESS BY THE DEPARTMENT OF THORACIC SURGERY—Drs. Drash and M. L. White.
Discussion and Questions—10 minutes.

2:00 p.m.—Dr. James F. Brailsford, Birmingham, England—*invited guest.* Subject to be announced later.

3:00 to 4:30 p.m.—Presentation of interesting films with clinical history and follow-up, if possible. Members bring their own cases.

All meetings will be held in the auditorium of McKim Hall which is the Nurses' Home for the University Hospital.

Dr. C. H. Peterson, Roanoke, and Dr. P. B. Parsons, Norfolk, are president and secretary, respectively, of this Society.

The Industrial Physicians and Surgeons

Of the United States and Canada will hold their 34th annual meeting at Detroit, April 2-9, with headquarters at the Book-Cadillac and Statler Hotels. Participating groups are: American Conference of Governmental Industrial Hygienists American Industrial Hygiene Association; American Association of Industrial Dentists; and American Association of Industrial Nurses.

The Southwestern Virginia Medical Society

Will hold its next meeting on Thursday, May 26th, at the Hotel Roanoke, beginning at 2:00 P. M., with a banquet at 7:00 at which there will be two guest speakers. Dr. R. M. DeHart is president and Dr. Andrew F. Giesen, secretary-treasurer. Both are of Radford.

Congress On Obstetrics and Gynecology.

The International and Fourth American Congress on Obstetricts and Gynecology will be held on May 14-19, at the Hotel Statler, New York City. The morning meetings will be general sessions devoted to one of five topics: physiology of human reproduction; the pathology of human reproduction; social and economic problems; neoplastic diseases of the female reproductive system; and (5) obstetric and gynecologic procedures. The afternoons will be given over to meetings of the various groups represented.

All inquiries pertaining to the meeting should be addressed to the Chairman, Dr. Fred L. Adair, 24 West Ohio Street, Chicago 10, Illinois.

Virginia Council On Health and Medical Care.

Dr. H. B. Mulholland, University of Virginia, was re-elected chairman of this organization at its recent meeting, and Senator Charles R. Fenwick, Arlington, was named first vice-chairman. Miss Ellen H. Smith, Richmond, is secretary. The Council approved a resolution recommending establishment of full-time public health chairs at the University of Virginia and the Medical College of Virginia.

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Lancaster County Health Unit.

A health committee to be known as the Lancaster County Health Unit has recently been established at Kilmarnock, with Dr. Melvin B. Lamberth, Jr., of Kilmarnock, as president.

The Philadelphia County Medical Society

Will hold its 13th Annual Postgraduate Institute at the Bellevue-Stratford Hotel, Philadelphia, from April 5-8, 1949. The program has been arranged on the basis of symposia and the following subjects will be covered: Diseases of the Circulatory System; Common Conditions in the Oral Cavity; Diabetes; Anterior Poliomylitis; Blood Dyscrasias; Diseases of the Kidney; Miscellaneous Problems; Pain; Industrial Medical and Surgical Problems; Common Obstetric Problems; Problems of Infancy and Childhood; Eye, Ear, Nose and Throat; Gastro-Intestinal Problems; Vaginal Discharge (Causes and Treatment).

There will be the usual number of high-grade technical exhibits. The admission fee for the entire Institute is $5.00. Programs will be available very shortly. For further details contact Gilson Colby Engel, M.D., Director, 301 South 21st Street, Philadelphia 3, Penna.

Course in Medical Mycology

A month's course in Medical Mycology under the direction of Dr. Norman F. Conant, is to be offered at Duke University School of Medicine and Duke Hospital, Durham, N. C., during July, 1949. The course will be offered every day in the week, except Sunday, and has been designed to insure a working knowledge of the human pathogenic fungi within the time allotted.

The number of applicants for the course will be limited and the applications will be considered in the order in which they are received. An attempt will be made, however, to select students on the basis of their previous training and their stated need for this type of work.

A fee of $50.00 will be charged for this course, upon the completion of which a suitable certificate will be awarded. Please direct inquiries to Dr. Norman F. Conant, Duke University School of Medicine, Durham, N. C.

Fellowships Available.

On July 1, 1949, there will be available several two-year fellowships in the Medical Department, Duke University School of Medicine, Durham, N. C. The stipends will be $2,400 the first year, and $3,000 the second year. Only those who have completed three years of training in internal medicine, or a satisfactory equivalent, will be eligible for these positions, which have been designed to prepare the candidate for the practice of internal medicine. The following places will be available:

1. Hematology and Allergy
2. Pulmonary diseases
3. Gastro-enterology
4. Hypertensive cardiovascular and renal diseases
5. Metabolic diseases
6. Cardiology
7. General Internal Medicine and Therapeutics

Anyone interested should write to Dr. Eugene A. Stead, Jr., Professor of Medicine, Duke University School of Medicine, Durham, North Carolina.

Richmond Chapter, American Heart Association.

Dr. William H. Higgins is president of the Richmond Chapter of the American Heart Association, with Irving May and Mrs. Dave Satterfield, Jr., as vice-presidents, and Luke H. Fairbank as secretary-treasurer. A number of prominent laymen as well as the following doctors constitute the list of directors: Drs. Robley D. Bates, Nathan Bloom, Alex. G. Brown, III, Paul D. Camp, Douglas G. Chapman, Dean B. Cole, H. W. Decker, Louise F. Galvin, Emily Gardner, Wm. H. Higgins, J. Morrison Hutcheson, Edward M. Holmes, Carolyn McCue, William B. Porter, Reno Porter, Wellford C. Reed, W. Taliaferro Thompson, Jr., Armistead Williams, and Ennion S. Williams.

Study of Child Health Services.

Publication of the national report on the findings of the recently completed 2½-year study of child health services will be marked by a dinner on April 2nd in New York City, according to announcement of Dr. Warren R. Sisson, President of the American Academy of Pediatrics. A nationally known layman as well as an outstanding authority in medicine and public health will be guest speakers. The two-volume report which is now in press is being published by the Commonwealth Fund of New York.

Approve Chicago Medical School.

The American Medical Association and the As-

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sociation of American Medical Colleges has granted full aproval to the Chicago Medical School.

The recognition gives Chicago five approved medical schools, an equal number with New York City.

Announcement of the approval was made at White Sulphur Springs, W. Va., where the A. A. M. C. was holding its annual meeting. The Council on Medical Education and Hospitals of the A. M. A. met simultaneously to take action on the Chicago Medical School. A joint statement said:

"The Chicago Medical School now offers an educational program that meets the standards for an approved medical school. Therefore, the school is now included on the list of approved medical colleges and hospitals of the A. M. A. and is admitted to membership in the A. A. M. C.

"This action applies to all students now enrolled in the regular four year course at the school."

For Sale.

Eye, ear, nose and throat practice of Dr. F. A. Ward, deceased, including all equipment. For particulars, write Mrs. F. A. Ward, P. O. Box 166, Suffolk, Virginia. (*Adv.*)

Wanted.

Industrial and colliery physician for one staff opening soon. Salary and extras about $700 a month net. General practice and obstetrics in home. Must be A grade medical school graduate. Sober, no addiction and dependable. Three bedroom steam heated home. Easy access to large shopping centers. Interview necessary. Write full details to Dr. W. B. Barton, Stonega, Virginia. (*Adv.*)

Internist,

31, Board Eligible, available July 1949, group or association; graduate University of Virginia; fellowship cardiology; residencies neurology and internal medicine; competent in electrocardiography; Alpha Omega Alpha; Protestant; Veteran; Married; Prefer East. Write "Internist", *Virginia Medical Monthly*, 1200 East Clay Street, Richmond 19. (*Adv.*)

Doctor Wanted.

Doctor wanted to take over well equipped, eight-room doctor's office, with well established practice in eastern North Carolina town of 3,000 population. Modern hospital 18 miles distant on Route 301 South. If interested, write Harrison Drug Company, Enfield, North Carolina. (*Adv.*)

Position At Station Hospital.

There is a vacancy in the Station Hospital at Camp Lee, Virginia, for a Medical Officer (Eye, Ear, Nose and Throat), P-5, $6,235.20 per annum. Any one interested, should communicate with Employee Utilization Section, Civilian Personnel Headquarters, Camp Lee, Virginia. (*Adv.*)

OBITUARIES

Dr. Hunter Holmes McGuire,

Former president of the Medical Society of Virginia and member of many of its committees from time to time, died in his sleep at his home in Winchester, in the early morning of January 22. He was born in Winchester in 1875 and studied medicine at the former University College of Medicine, Richmond, from which he graduated in 1897. He joined the Medical Society of Virginia the following year and was among those honored in the "Fifty Year Club" at the last meeting of the Society. He had always been active in civic affairs and was one of the founders of Winchester Memorial Hospital and had been its president for forty-eight years. He was also a founder and first president of the Virginia Society of Ophthalmology and Oto-Laryngology, and a past president of the American Ophthalmological Society. He is survived by his wife and three children by a former marriage, one of them, Dr. William P. McGuire with whom he was associated in practice.

RESOLUTION

BE IT, AND IT IS HEREBY RESOLVED by the Medical Staff, Winchester Memorial Hospital, Winchester, Virginia, meeting in regular monthly session this second day of February, 1949, that:

1. The sudden death of Dr. Hunter Holmes McGuire

on Saturday morning, January 22, 1949, is regarded by the members of this Staff to represent a loss of irreparable kind—not only to the Hospital, the founding of which was made possible by his guiding hand, but also to our own profession, which he so valiantly upheld, and the standards of which he constantly strove to further, and a loss to the community as a whole wherein he lived, and one to his many warm friends, admirers, and professional associates and acquaintances situated throughout various parts of the nation, as well as in Canada and Europe;

2. This Staff held Dr. Hunter Holmes McGuire in the highest esteem, and recognized his virtues of gentle kindness, sobriety, tolerance, fair dealing, sterling character, gentlemanly conduct, wisdom, professional ability, and professional ethics;
3. The deepest sympathy of the members of this Staff, individually and collectively, is hereby extended to the widow of our deceased friend and associate, and to his son and daughters and the other survivors, all of whom with us mourn his loss;
4. This Resolution be spread upon the minutes of this meeting, and thereby be made a permanent record in memoriam to the said Dr. Hunter Holmes McGuire, and copies of this Resolution be sent to the members of Dr. McGuire's family.

Dr. Philip Williams Boyd,

Prominent physician of Winchester, died of a heart attack on February 17th. He was stricken while attending a Rotary Club luncheon. Dr. Boyd was seventy-four years of age and a graduate of the University College of Medicine, Richmond, in 1898. He had been a life-long resident of Winchester and had been associated with the surgical staff of Memorial Hospital since its establishment nearly half a century ago. He served as president of the Virginia State Board of Medical Examiners for many years and had always taken a prominent part in medical activities in the state and in the Shenandoah Valley. Dr. Boyd was a former president of the Shenandoah Apple Blossom festival and engaged extensively in fruit growing. He had been an active member of the Medical Society of Virginia for fifty years, having served as a vice-president and on numerous committees. He was awarded his "Fifty Year Certificate" for practice at the 1948 meeting and made a Life Member. His wife and two daughters survive him. A brother is Dr. John O. Boyd of Roanoke.

Dr. Rufus Speed Kight,

One of Norfolk's best known physicians, died February 12th after a short illness. He was a native of North Carolina, although he had lived most of his life in Norfolk, and was seventy-two years of age. Dr. Kight graduated in medicine from the University of Maryland in 1900. He was for many years coroner for the city of Norfolk. He was a past president of the Norfolk County Medical Society, an honorary member of the American College of Surgeons, and had taken an active part in the Virginia Obstetrical and Gynecological Society. Dr. Kight had been a member of the Medical Society of Virginia for forty-seven years. His wife and four children survive him.

Dr. Isham Keith Briggs,

Physician and surgeon of South Boston, died February 8, after a week's illness attributed to a heart ailment. He was sixty-seven years of age and a graduate of the former University College of Medicine, Richmond, in 1904, later taking post-graduate work at the Mayo Clinic in Rochester, Minn. He joined the Medical Society of Virginia two years later. He was a medical examiner for the local draft board in both world wars, was a former president of the South Piedmont Medical Society, and active in civic and religious affairs. His wife and a daughter survive him.

Dr. Charles Bickley Fox,

Well known physician of Monterey, died January 26th, having been in ill health for some time. He was seventy-six years of age and a graduate in medicine from the University of Virginia in 1899. Dr. Fox had practiced in Monterey except for a short period since his graduation and for eight years served as its Mayor and also as county coroner. He was a Mason and had been a member of the Medical Society of Virginia for forty-eight years. Two daughters and a son survive him.

Dr. Irving Lee Chapman.

Dr. Chapman had been ill since New Year's day when he suffered a stroke while attending the Sugar Bowl game in New Orleans. He attended the Baltimore Medical College from which he graduated in 1904, and had been a member of the Medical Society of Virginia since 1915. His wife and a son survive him.

The members of the Norfolk County Medical Society feel that its records should contain in permanent form the resolutions on its beloved member, Doctor Irving Lee Chapman, who died at a local hospital January 20, 1949.

Doctor Chapman, affectionately called "Pappy" by his younger associates, had practiced in South Norfolk for

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thirty-five years (he had practiced ten years elsewhere previously) doing an enormous general practice and was said at one time to have delivered more babies than any other doctor in Virginia. Doctor Chapman's sincere kindness, sympathy and devotion to his profession endeared him to countless thousands of patients in a manner seldom seen in the present day. He served South Norfolk as Health Officer without pay from 1922 until his death.

He did not limit his interest in medicine but was a member of numerous fraternal and civic organizations and all his fellow men loved his jovial company and disposition.

We respect him as an outstanding physician; we honor him as a citizen devoted to his community and we cherish his memory as a friend and associate.

BE IT RESOLVED that a copy of this resolution be recorded in the minutes of the Norfolk County Medical Society, and a copy be sent to the family as well as to the VIRGINIA MEDICAL MONTHLY.

(Signed)
C. L. HARRELL
M. S. HERRINGTON
G. W. SIMPSON

Dr. Clifford Harry Beach,

Well known physician of Richmond, died February 16th after a brief illness. He was forty-five years of age and a graduate of the Medical College of Virginia in 1928, having previously graduated in pharmacy. Dr. Beach was for sometime associated with McGuire Clinic and was medical director of the Home Beneficial Life Insurance Company. He had been a member of the Medical Society of Virginia for fifteen years. His wife and a daughter survive him.

Dr. William Douglas Macon

Was born at Clover Hill, Keswick on April 17, 1869 and died on December 30, 1948 at the age of seventy-nine years. He received his bachelor's degree from Randolph-Macon College in 1888. After seven years of teaching in elementary schools he entered the University of Virginia Department of Medicine from which he received the degree of Doctor of Medicine in 1897. After an internship at the Willard Parker Hospital in New York City he returned to Charlottesville and entered general practice with increasing emphasis on obstetrics. He became Clinical Instructor in Anesthesia in his alma mater in 1904, Clinical Instructor in Anesthesia and the Practice of Medicine in 1905, and Professor of Obstetrics in 1923, resigning in 1924 when the Department of Obstetrics and Gynecology was reorganized. After a severe illness a few years later he began to limit his practice and in recent years had completely retired. He was a member of the Albemarle County, the Virginia State, the American and the Tri-State Medical Associations, as well as the Alpha Omega Alpha Society. He served several terms as Health Officer for the City of Charlottesville.

As a physician Dr. Macon typified the ancient virtues of the profession. He was never known to refuse a call no matter what the difficulties or inconvenience. He possessed sound judgment and technical skill. During his early practice he was a pioneer in Virginia in the use of intubation in laryngeal diphtheria. Later he became increasingly the obstetric consultant for a large area before the days of highly developed hospital obstetrics. As a teacher of obstetrics he was outstandingly successful. As a personality he was distinctive. From his earlier education and from his years of non-medical teaching, he retained an extraordinarily developed curiosity about all intellectual matters, resulting in wide and catholic reading. His level of cultivation in history, particularly the history of Virginia, general literature, and the arts was amazing. He was the best-read man among the physicians of Albemarle County. Following his retirement he regularly attended as an auditor classes of the University of Virginia College of Arts and Sciences both in undergraduate and graduate subjects. Coupled to his intellectual interest was a ready wit that shot bright shafts of light into what might become a dull discussion. As a friend he was always kind, always cheerful, always outreaching, always stimulating. When new and younger men entered the profession in Charlottesville, he was the first to make them feel truly welcome, the one upon whom they could earliest feel they could rely as a friend.

The Albemarle County Medical Society and the University of Virginia Medical Faculty wish to express their unanimous feeling that in Dr. Macon's death they have lost an able and beloved member, and that the community has lost an irreplaceable citizen. They desire further to place this record on their minutes and on the pages of the Virginia Medical Monthly and to send it to his family.

ALBEMARLE COUNTY MEDICAL SOCIETY
AND
MEDICAL FACULTY OF THE UNIVERSITY OF VIRGINIA
HALSTEAD S. HEDGES
EDWIN P. LEHMAN